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**Subject: Truck Industry Council submission to the NTCs Discussion Paper –
Government Access to Vehicle Generated Data - May 2020**

The Truck Industry Council (TIC) is the peak industry body representing manufacturers and distributors of heavy commercial vehicles (that is, with Gross Vehicle Mass above 3.5 tonne) or trucks, in Australia. TIC members are responsible for locally producing, or importing and distributing 16 brands of truck for the Australian market, totalling almost 38,000 new heavy on-road vehicles sold in 2019. Of those vehicles, TIC members supplied to market over ninety-nine (99) per cent of trucks above 4.5 tonne Gross Vehicle Mass (GVM). Additionally, TIC members also included two dedicated engine manufacturer's and two dedicated driveline manufacturers who supply major engine and driveline systems for both on highway and off highway truck applications.

TIC supports a collaborative approach for the development and deployment of guidelines, procedures and codes of practice as the first step in the future introduction of advanced vehicle and vehicle related technologies where, consumers, the general public, government and industry can all benefit from mutual cooperation. These non-regulatory measures can, in time, be transitioned into laws and regulations, where and when required, as the technology matures. It is very important for Australia to, wherever possible, ensure alignment with international laws and regulations. Should Australia choose to introduce its own unique laws and regulations with regard to these future technologies, deployment of such systems in Australia will be stifled, if not halted completely. Australian policy developers and regulators must recognise that Australia is a technology taker in the vehicle industry with most advanced vehicle technologies developed beyond our shores and that Australian heavy vehicle sales make up less than one percent (<1%) of global truck sales each year.

Global regulators and vehicle manufacturers are working to create standards, regulations and importantly timeframes, for the development and introduction of connected vehicle technologies that can significantly improve the safety of all road users including vulnerable users. Australian harmonisation with international regulations, particularly European ECE regulation, will allow our country to benefit from the advances this global research and development brings to these challenging technologies. It must be realised by those developing Australian policy and regulation in this area, that issues of safety, privacy, cyber security, ethics, etc are fundamentally the same in democratic countries and regions where these technologies are being developed globally and that the governments of these countries are taking a systematic, step-by-step, approach to regulation



development. Australian regulators must avoid the development of local laws ahead of these international developments. By harmonising our Australian Design Rules (ADR) with UN regulations, Australia has and will continue to benefit from the economic development of technologies for world markets and not be isolated from receiving these latest advances. Additionally, Australian truck operators will continue to enjoy the benefits of the considerable competition that occurs through having one of the most open and competitive heavy vehicle markets in the world.

TIC is of the firm belief that government must develop and implement a more holistic and co-ordinated plan to address road vehicle safety in Australia and whilst connected vehicle technology and the ability to share data will have safety (and other) benefits into the future, governments must acknowledge that the very high average age of the Australian heavy vehicle fleet, 14.74 years for trucks above 4.5t GVM (Source: ABS Motor Vehicle Census 2019), is preventing the uptake of a vast array of Advanced Driver Assistance technologies that already exist globally and to a more limited extent in Australia. A nationally consistent plan to accelerate the uptake of technologies such as the below, across our nations truck fleet, would have a more positive benefit to road safety outcomes in the short to medium term, than a plan to gathering data from connected vehicles. These technologies include:

- Electronic Stability Control (ESC)
- Automated Emergency Braking (AEB)
- Lane support systems (Lane Keep Assist Systems - LKAS, or Lane Departure Warning - LDW)
- Adaptive cruise control
- Forward collision warnings
- Blind spot detection and warning

Research undertaken by the Truck Industry Council indicates that with current truck fleet age and current truck replacement rates applied, it would take until 2049 for 95% of the Australian truck fleet to be fitted with ESC and take until the year 2052 for 95% of the fleet to be fitted with AEB (the latter assuming an ADR enforcement date of 2024). LKAS, LDW and blind spot detection and warning regulations are not even under consideration by Australian government at present, with their uptake likely to be well beyond the introduction dates detailed for ESC and AEB.

If the government were to enact measures (such as those detailed in the Truck Industry Council's National Truck Plan, a copy of the Plan is available upon request) to modernise the Australian truck fleet to ensure the take up of more vehicles incorporating these systems, a measurable, positive impact on road safety would result.

QUESTION 1: DO OUR PROBLEM AND OPPORTUNITY STATEMENTS ACCURATELY DEFINE THE KEY PROBLEMS TO BE ADDRESSED, AND DO THEY CAPTURE THE BREADTH OF PROBLEMS THAT WOULD NEED TO BE ADDRESSED?

TIC agrees that the NTCs problem statements outlined on Page 20 of the Discussion Paper accurately define the key problems that need to be addressed if vehicle generated data is to be exchange or shared for road safety purposes. Further, TIC believes that three more problem statements could/should be considered:

4. Vehicle generated data is only useful if it can be transmitted beyond the vehicle and this requires vehicles, or vehicle systems, to incorporate a level of communication connectivity and communication protocols which is not largely deployed in Australia. With no overarching principles, introduction has and will continue to occur according to competitive



market forces based on value-add factors that appeal to consumers/operators and not based on improving road safety outcomes.

5. Government and/or transport agencies in Australia have not yet developed and shared with industry and vehicle owners/operators an agreed vision nor developed a business case, or cases, that details the road safety value/benefit of vehicle generated data.
6. Acknowledgement that while vehicle generated data is quite prevalent within the heavy vehicle road freight industry, the data captured and/or transmitted from the vehicle is not done by an Original Equipment Manufacturer (OEM) system, however by an aftermarket, 3rd party system, that is neither supplied, owned, or controlled by the vehicle OEM.

QUESTION 2: IN OUR TABLE, HAVE WE ACCURATELY CAPTURED ALL THE REGULATORY AND LEGISLATIVE MECHANISMS GOVERNMENT COULD CURRENTLY USE TO ACCESS VEHICLE-GENERATED DATA?

TIC believes that this question is better answered by the various governmental organisations that regulate on-road vehicle use within Australia.

QUESTION 3: ARE THERE OTHER MAJOR LOCAL OR INTERNATIONAL JURISDICTIONAL DEVELOPMENTS PROVIDING FURTHER ACCESS POWERS OR ARRANGEMENTS FOR VEHICLE-GENERATED DATA?

TIC agrees that NTC has adequately covered the major international regulation arrangements that exist, or that are under development, that Australia could consider aligning with. TIC would not support alignment with non-European (ECE) regulations, unless the non-European regulation was considered an “alternative standard/regulation” to the European regulation and not the “primary regulation”.

QUESTION 4: DO YOU AGREE WITH OUR ASSUMPTIONS ON THE CURRENTLY LOW UPTAKE AND LIMITED AVAILABILITY OF TECHNOLOGY THAT SUPPORTS THE GENERATION OF VEHICLE DATA AND THAT THERE ARE FEW AND LIMITED CURRENT GOVERNMENT ACCESS ARRANGEMENTS FOR VEHICLE-GENERATED DATA?

TIC agrees only in part with this statement. The NTCs statement that there are few and limited current government access arrangements for vehicle-generated data is generally supported by TIC with the exception (as previously acknowledged in the NTC Discussion Paper) to this being heavy vehicles enrolled in a current regulatory access or compliance scheme. However, TIC does not accept the NTCs assumption that there is currently low uptake and limited availability of technology that supports the generation of vehicle data for heavy vehicles. TIC is of the belief that vehicle generated data is quite prevalent within the heavy vehicle road freight industry and that a significant amount of this data is captured and/or transmitted from the vehicle, however these systems are not typically supplied, neither owned, or controlled, by the vehicle OEM. These systems are largely aftermarket, 3rd party, installations.

QUESTION 5: WHAT ISSUES DO YOU BELIEVE WILL BE CREATED IF ExVE IS ADOPTED AND THAT WOULD NEED TO BE CONSIDERED IN AUSTRALIA?



TIC supports the European concept of ExVE, in particular ensuring that suitable, robust and internationally consistent cyber security protocols exist for of vehicle generated and transmitted data. However, at this point in time ExVE regulations have not been developed to a point that their effective adoption/integration in an Australia context can be envisaged. In particular TIC requires far more information from Australian government as to how an effective and workable level of (network) connectivity can be provided, beyond the vehicle, to ensure that ExVE can be effectively deployed in Australia. TIC also requires the same level of dialogue between government/regulators and industry on how vehicle generated data would be stored and protected if ExVE was rolled out in Australia, also who would have access to the data and how would the data be actually provided. There are considerable issues relating to all of the above that are yet to be worked out in Europe, let alone the discussions that must take place in Australia before ExVE could be considered here.

QUESTION 6: IS THERE VALUE IN ESTABLISHING A NATIONAL DATA AGGREGATOR OR TRUST BROKER? COULD GOOD DATA DEFINITIONS, PRACTICES AND COOPERATION BETWEEN ENTITIES ACHIEVE THE SAME OUTCOME?

TIC does not consider that a National Data Aggregator, or Trust Broker, would be necessary, nor does TIC support this concept. The most likely outcome of such an organisation would be to increase costs for the road transport industry and/or vehicle OEMs. TIC points to the heavy vehicle Intelligent Access Program (IAP) that has largely floundered with many operators either not participating in, or eventually leaving, the scheme, due to the excessive regulatory “red tape” and excessive charges from the scheme’s telematics regulator. TIC is of the view that with carefully designed data definitions and formalised legal agreements, within industry, that such a National Data Aggregator, or Trust Broker, would be unnecessary.

QUESTION 7: CAN YOU PROVIDE US WITH MORE INFORMATION ON EITHER THE COSTS OR BENEFITS FOR GOVERNMENT ACCESS TO VEHICLE-GENERATED DATA FOR THE USE CASES LISTED IN APPENDIX B?

TIC and TIC members largely, do not currently have access to this level of information, as the vast majority of in-service heavy vehicle generated data gathering telematic systems are provide by aftermarket, 3rd party, organisations, rather than vehicle OEMs. Further, TIC believes that it would be premature to comment on the costings of vehicle generated data at this point in time without considerably more consultation with government about the type and volume of data that is to be collected, data protocols, how the data might be best (and alternatively) transmitted and received, data storage (on and off the vehicle) and security and data access requirements.

QUESTION 8: ARE THERE RELEVANT INTERNATIONAL STANDARDS THAT SHOULD BE ADOPTED FOR VEHICLE GENERATED DATA? ARE THERE ANY STANDARDS THAT COULD BE LOCALLY DEVELOPED?

TIC does not support the development of any Australian unique standards or regulations for the adoption of vehicle generated data. Australia is a technology taker in the vehicle industry with most advanced vehicle technologies developed beyond our shores, with Australian heavy vehicle sales making up less than one percent (<1%) of global truck sales each year. Australia has benefitted significantly from harmonisation with European (ECE) safety and environmental regulations over the past two decades. The benefits of this harmonisation have been realised in many areas, including vehicle availability/choice and pricing for consumers. With vehicle generated data and connectivity,



TIC only supports continued harmonisation with European (ECE) standards and regulations as they have been and continue to be, developed and implemented in Europe. To deviate from this proven approach would only stifle, if not completely halt, the uptake of vehicle generated data, particularly at a vehicle OEM level.

QUESTION 9: HAVE WE ACCURATELY DESCRIBED THE KEY BARRIERS TO ACCESSING VEHICLE-GENERATED DATA? ARE THERE ADDITIONAL BARRIERS?

The key barriers to accessing vehicle generated data identified in the NTCs Discussion Paper include:

- Transport agency capabilities to ingest and use data
- Data not captured or stored
- Willingness to share data
- User privacy and sensitive data
- Costs to industry and governments
- Privacy and managing consent (user opt-in/opt-out)
- Lack of agreement on data standards
- Assurance of devices and data
- Low penetration of connected vehicles in Australia

As previously detailed in our response to Question 4 above, TIC does not believe that “Low penetration of connected vehicles in Australia” is an accurate assessment/statement for Australian heavy vehicles.

In addition to the above, TIC believes that there are several other barriers including:

- A viable (cost vs benefit) cases for access to vehicle generated has not yet been established by Government/Transport agencies.
- The potential for vehicle generated data, that is not part of a government use case, to be captured and stored for use by industry for their use cases/benefit (subject to presentation of a suitable business case and data use/privacy agreements).
- Costs to industry and governments has been identified in the Discussion Paper however the ongoing costs to consumers/vehicle owners/users, has not been flagged/addressed (data plan costs, etc).
- Transport agencies/regulators manage vehicles on their road networks and within these organisations hold various enforcement powers. This “big brother” concern (be it real or perceived) could be a barrier to data sharing that may influence their decision to “opt-in”.
- The benefits and down sides (if any) of any vehicle generated data sharing plan/proposal/project must be clearly articulated to vehicle owners and users.

QUESTION 10: DO YOU AGREE THAT ROAD SAFETY DATA SHOULD BE CONSIDERED THE PRIORITY PURPOSE FOR WHICH WE SEEK TO EXCHANGE DATA WITH INDUSTRY?

TIC agrees that “road safety” data should be considered as the priority purpose of vehicle generated data exchange with industry, however not the sole purpose. Consideration must be given by government to industry “use cases” that may further industries desire to be involved with data sharing projects. At times government takes too narrow view of their interaction with industry. A good example is how Transport agency held vehicle owner contact information is only available to vehicle OEMs for a significant fee, in order for the OEM to undertake vehicle safety recalls. This data



is only being sought by vehicle OEMs for publicly beneficial outcomes, that is directly associated with improving individual vehicle safety and consequently road safety generally.

QUESTION 11: WHAT ARE THE KEY DATA NEEDS OF TRANSPORT AGENCIES BEYOND THOSE ALREADY IDENTIFIED?

TIC believes that this question is better answered by the various transport agencies that regulate on-road vehicle use within Australia.

QUESTION 12: WHAT FURTHER BENEFITS FROM VEHICLE-GENERATED DATA SHOULD BE CONSIDERED?

As well as the safety benefits, vehicle generated data could be used to gain benefits in:

- Traffic flow/reducing infrastructure bottlenecks and congestion.
- A more robust and fairer (user pays) Road User Charging (RUC) scheme, based on vehicle type, use, location and mass. As well as potentially include an environmental damage component based on the age and use of an individual vehicle (a pollution damage component to the RUC).

QUESTION 13: WE CONTEND THAT A PRIORITISED STARTING POINT SHOULD BE ESTABLISHED FROM WHICH DATA FOR OTHER PURPOSES CAN BE FURTHER DEVELOPED. ARE THERE OTHER APPROACHES THAT COULD ACHIEVE THIS?

Other potential vehicle generated data approaches could include:

- Vehicle generated data could be exchanged on an “at cost” basis with individual vehicle owners and/or users, vehicle OEM, or even industry sectors.
- Vehicle generated data could be shared on an exchange basis for mutually beneficial outcomes with individual vehicle owners and/or users, vehicle OEM, or even industry sectors.
- Vehicle generated data could be shared on commercial terms, particularly where Transport agencies may be able to reduce their current expenditure, or better utilise expenditure, by using vehicle generated data (for example road maintenance).

It must be noted that the use of vehicle generated data for other purposes other than what was originally agreed to, would require vehicle owner and/or user permission and that this may pose ongoing challenges for Transport agencies/government, vehicle user/owners and vehicle OEMs alike.

QUESTION 14: DO YOU AGREE WITH THE ANALYSIS PRESENTED IN TABLE 7? WHAT OTHER OPPORTUNITIES ARE THERE FOR VEHICLE-GENERATED DATA, AND WHY?

Table 7 is an extremely broad representation and generalisation of the potential vehicle data that could be generated and shared. Also, the definitions of the terms used in Table 7 have not been defined in the Discussion Paper. Further, no indication has been given in Table 7 nor the Discussion Paper as to the take up rates (the number of vehicles that would be involved in data sharing). With much of this key detail missing, it is not possible for TIC to provide any relevant feedback on the table. While TIC has indicated its general support of the concept of vehicle generated data sharing for the development of better road safety outcomes for all road users and the general public benefit,



TIC cautions against the use of simplified representations of such a complex issue. As such, TIC does not believe that it would be beneficial to comment on Table 7 as a whole, or its individual elements.

QUESTION 15: HAVE PRIORITIES CHANGED FOR LAND TRANSPORT POLICY AND FOR DATA ACCESS FROM VEHICLES WITH THE ONSET OF COVID-19?

TIC believes that this question has been directed to and should primarily be answered by, Land Transport Agencies concerning policy prioritisation since the onset of COVID-19. However, TIC does not believe that the fundamental priorities of using vehicle generated data to improve road safety outcomes should be affected by the onset of COVID-19.

One unfortunate outcome that has eventuated from the COVID-19 outbreak, is the significant impact on Australia's economy has considerably slowed new truck sales. This will result in an increase of the average age of the Australian truck park, further slowing the take up of advanced safety features and connectivity in heavy vehicles.

QUESTION 16: SHOULD ROAD SAFETY BE ADOPTED AS THE PRIORITY FOR DEVELOPING USE CASES FOR GOVERNMENT USE OF VEHICLE-GENERATED DATA? IF NOT, WHAT OTHER APPROACH SHOULD AUSTRALIA TAKE?

TIC believes that the primary priority for developing "use cases" for vehicle generated data should be to benefit road safety. However, those road safety outcomes must be defined in the context of the existing National Road Safety Strategy, that is developed, reviewed and updated by the Department of Infrastructure and Transport in Canberra. If there are better, more cost effective safety outcomes, these must be pursued in preference to vehicle generated data "use cases".

QUESTION 17: CAN DATA OTHER THAN FOR THE PURPOSES OF ROAD SAFETY BE EXCHANGED ON NON-COMMERCIAL TERMS?

TIC is of the opinion that it may be possible to exchange vehicle generated data for purposes other than road safety outcomes, on "non-commercial" terms. If there is a benefit for the end user, for example reduced traffic congestion, or faster transit times, vehicle owners and operators may be willing to enter into data sharing agreements. However there will always be some costs associated with data transmission, storage, etc, (possibly even data generation in the first place), also the cost of the in-vehicle hardware to gather and transmit data, so it would be more likely that a commercial arrangement would need to be developed between parties. Essentially TIC believes that discussions of this nature are premature at this point in time, the current focus should be to develop data exchange to improve road safety outcomes first. Other "use cases" and arrangements, either commercial, or non-commercial should follow at a later date.

QUESTION 18: DOES THE NTC'S PREFERRED APPROACH (OPTION 2) BEST ADDRESS THE PROBLEMS WE HAVE IDENTIFIED? IF NOT, WHAT APPROACH WOULD BETTER ADDRESS THESE PROBLEMS?

TIC supports:

Option 2: Establish a data exchange partnership between industry and government that will identify opportunities for exchanging vehicle-generated data as well as develop standards and consider proof of concept; as our preferred option for the heavy vehicle industry.



Further, TIC supports developing a shared government and industry vision and principles, that clearly defines the road safety goals that could eventuate by sharing vehicle generated data. Additionally, TIC does not support the concept of a third-party data aggregator that will likely add unnecessary regulatory burden and cost. Rather, TIC supports data being managed by industry under carefully designed data definitions and formalised legal agreements.

QUESTION 19: DOES THE NTC'S PROPOSED APPROACH BEST ADDRESS THE PROBLEMS WE HAVE IDENTIFIED? IF NOT, WHAT APPROACH WOULD BETTER ADDRESS THESE PROBLEMS?

TIC supports the NTC's proposed approach to develop a mutually accepted data exchange partnership between industry and government that will identify and develop "use cases" for the exchange vehicle generated data between industry and government for the purpose of improving road safety outcomes. Any such scheme and/or agreements should be entered into on a voluntary basis and not legally binding on any parties.

TIC strongly suggests that a trial "pilot scheme" be developed to test the concepts that are determined from the outcomes of this Discussion Paper and the submissions received. Such a "proof of concept" trial would display the worth/merits, problems/issues and safety outcomes/benefits that could be derived from the sharing of vehicle generated data between industry and government. If successful outcomes are achieved, the trial could be used as the basis for deployment of a broader vehicle generated data scheme.

Finally, TIC wishes to make the following comments with regard to the NTCs suggestion that adoption of the European eCall regulation, as an ADR, or similar, would increase vehicle connectivity in Australia. TIC makes no claims or assertions of the safety value/benefit of eCall in the event of a severe vehicle crash event, that is a separate issue and should be subjected to further discussion and a robust cost vs benefit analysis. However, for the NTC to suggest that eCall was a means to gain vehicle connectivity to provide transmission of vehicle generated data for the development of ongoing road safety benefits is simply not valid. The following text is from the European Commission Transport website: https://ec.europa.eu/transport/themes/its/road/action_plan/ecall_en

eCall is NOT...

- eCall **is not a black box**. It does not record constantly the position of the vehicle, it records only a few data to determine the position and direction of the vehicle just before the crash and these data are only transmitted to emergency call centers if there is a serious crash.
- eCall **cannot be used to monitor motorist's moves**. The SIM-card used to transmit the eCall data is dormant, i.e. it is only activated in case the vehicle has a serious accident (e.g. the airbag is activated).
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- the mandatory fitting of eCall in-vehicle system on all new types of M1* and N1** vehicles from 31 March 2018 onward.

* Category M1: Vehicles - passenger cars. Motor vehicles with at least four wheels designed and constructed for the carriage of passengers.

** Category N1: Vehicles designed and constructed for the carriage of goods and having a maximum mass not exceeding 3,5 tonnes.



This EU text confirms that eCall could not be used as a means of transmitting vehicle generated data from a vehicle (as implied by the NTC in the Discussion Paper), eCall is a “once off” transmission device that only transmits data once and as a result of a serious crash event. eCall only applies to M1 and N1 vehicles in Europe, therefore eCall is NOT a regulation applied to heavy vehicles above 3.5t GVM in Europe.

I trust that you find TIC’s submission acceptable and that the issues that have been raised in this submission will be considered in the review and development of the NTCs recommendations for the development and deployment of guidelines for a voluntary data exchange partnership between industry and government for vehicle generated data for the purpose of improving road safety outcomes in Australia.

Please contact the undersigned, on 0408 225212 or m.hammond@truck-industry-council.org for any questions about this submission.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Mark Hammond', written in a cursive style.

Mark Hammond
Chief Technical Officer