Mr Luis Gutierrez
Manager Productivity and Safety
National Transport Commission
Level 3/600 Bourke Street
MELBOURNE VIC 3000

10 July 2020

Dear Mr Gutierrez

The Australian Automobile Association (AAA) welcomes the opportunity to respond to the National Transport Commission's (NTC) discussion paper on *Government access to vehicle-generated data.*

The AAA is the peak organisation for Australia's motoring clubs and their more than eight million members. The association's constituent clubs are the NRMA, RACV, RACQ, RAA, RAC, RACT and the AANT. The AAA regularly commissions research and develops in-depth analysis of issues affecting transport systems, including affordability, road safety and fairness.

Please find enclosed the AAA's submission to the discussion paper, including its recommendations.

The AAA would welcome the opportunity to further discuss its submission.

Yours sincerely

Michael Bradley
Managing Director

Encl.   *AAA submission to the discussion paper on Government access to vehicle-generated data*

Government access to vehicle–generated data

Australian Automobile Association submission to the discussion paper

The Australian Automobile Association (AAA) welcomes the opportunity to respond to the National Transport Commission's (NTC) Discussion Paper on *Government access to vehicle-generated data.*

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Vehicle-generated data offers a range of potential benefits and could be used by government to improve the safety and/or efficiency of the transport network. By enabling government access to this data, agencies can:

- target safety improvements in the road network
- manage traffic in real-time and improve the efficiency of existing assets (with flow on environmental and fuel savings)
- monitor transport infrastructure performance
- target investments based on consistent and reliable data.

The AAA recommends that**:**

1. **the role and value of consumers in facilitating the generation of vehicle data be recognised and community consultation and education be incorporated to build consumer trust**
2. **the benefits of government access to vehicle-generated data be balanced with the need to protect privacy**
3. **further work be done to understand the use cases and challenges with government access to vehicle-generated data, explicitly including consumer interests and value**
4. **road safety data be the initial priority in considering government access to vehicle-generated data; however congestion and traffic management also be recognised as priorities to ensure that any steps towards government access to road safety data complement the development of these additional use cases.**

Vehicle-generated data

Technologies currently available in new vehicles enable the collection and transmission of vehicle-generated data such as location, airbag deployment and vehicle sensor data such as anti-lock braking system activation. As technology develops, increasing data capabilities may become available and present further opportunities through new data types and/or greater volumes of data.

The current low availability of connectivity in Australian vehicles – cited as just 10 per cent of new vehicles in the discussion paper – is a key challenge to realising the benefits of this technology. The AAA considers that this low penetration of these technologies has contributed to a relatively poor understanding of them, their possible use cases and challenges, which introduces difficulties in discussions around government access.

Discussing technologies and access to data in a forward-looking way is advisable, and the discussion paper reports the variety of different government views in the short, medium and long terms; including varying use cases, anticipated benefits, as well as understandings of technology and limitations.

The NTC proposal to increase penetration of connected technology in new vehicles through Accident Emergency Call Service (eCall) systems, by either regulation or incorporation into the Australasian New Car Assessment Program (ANCAP), relies on the business case for the eCall service alone rather than connectivity more broadly.

The role of supporting infrastructure in increasing the availability of technology in Australia must be recognised. The transmission and ingestion of large amounts of data will require supporting technology and infrastructure. Similarly, services linked to connectivity such as eCall require supporting infrastructure to be standardised, which in turn will affect their business cases. Without the supporting infrastructure, the technology uptake of eCall and connected vehicles more broadly may remain low.

The AAA therefore supports the NTC's efforts to further understand key issues and challenges facing greater vehicle connectivity in Australia, as well as government access to vehicle-generated data.

The AAA supports the NTC's recommendation to focus on road safety data as the initial priority, however congestion and traffic management use cases should also be recognised as priorities. This is to ensure that any steps towards government access to road safety data complements the development of these additional use cases. The NTC proposal to prioritise road safety data and establish a collaboration between industry and government to identify opportunities and challenges is appropriate, however it is unclear whether consumer interests will be prioritised in this collaboration.

Consumers and vehicle-generated data

The discussion paper suggests a focus largely on a one-way transfer of data to facilitate government access – the views of the consumer are not reported. As the consumer owning or driving the vehicle is generating the data, their contribution needs to be recognised and consumer benefits should be considered directly.

Two of the key challenges facing government access to vehicle-generated data in the short term are consumer acceptance and trust. They affect uptake, potentially delaying the benefits of technology found in new vehicles, which are generally safer, more fuel efficient and more environmentally friendly.

AAA polling of 2000 people in 2017 found that most respondents (82 per cent) were not aware of telematics systems in new vehicles. Furthermore, 83 per cent of respondents believed it is important that they should have the right to control access by third parties to the data in their vehicles; only seven per cent believed this was not important. An earlier AAA poll of 2,200 people in 2016 found that 71% of respondents were not aware that the manufacturer retains ownership of the data in their car.

The international experience has been similar. A public survey in 12 European countries of 12,000 participants in 2015 found that 90 per cent of respondents believed that vehicle data belongs to the vehicle owner or driver and 91% wanted the ability to switch off connectivity.[1]

However, consumer comfort levels change when the purpose of data is understood. A recent study by the RAC found that there is relatively high comfort with government having access to and using de-identified and aggregated vehicle-generated data in order to improve road safety,

reduce travel times, and inform the future planning of our cities, communities and transport networks.[2] Seven in ten respondents are "very" or "extremely" concerned about not knowing what data is being collected, stored, shared and used. Almost nine in ten think it is very or extremely important that government consults with industry and the community about this.

These findings are further supported by Finding 3.1 of the Productivity Commission Inquiry into Data Availability and Use:

Individuals are likely to be more willing to allow data about themselves to be used by private and public organisations, provided they understand why and how the data is being used, can see tangible benefits, and have control over who the data is shared with.[3]

A lack of community trust is a risk to the uptake of technology and the contribution of the consumer in generating the vehicle data needs to be recognised. The AAA believes that the benefits of government access to vehicle-generated data should be balanced with the need to protect privacy.

In considering government access to this data, particularly the costs involved (including manufacturers' costs to generate, transmit and store data, as well as privacy risks for consumers where data is not managed appropriately), the community should be provided with clarity and transparency around the specific use cases, their value, and an appropriate legislative framework for all and any data that may be considered personal.

The AAA therefore considers that transparency, ongoing community communication and engagement are necessary elements in developing policy options for government access and use of vehicle-generated data. These elements, including an education component, must be prioritised to ensure an appropriate level of community understanding about how vehicle owners' data will be used and how their privacy will be protected.

Responses to questions

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?**

The AAA agrees there is an opportunity for stakeholder collaboration on the exchange or sharing of vehicle-generated data to understand the possible use cases and what appropriate frameworks may look like. However, this focuses largely on the opportunity for government access to data via one-way transfer and appears to overlook additional opportunities associated with providing information back to the consumer generating the data.

The AAA agrees that road safety should be the initial priority, however it is important to ensure this process complements the development of further use cases. The AAA considers congestion and traffic management to be additional priority use cases.

The AAA agrees with the three problem statements presented however suggests that an underlying problem affecting the uptake and standardisation of connectivity in the Australian fleet is the availability of supporting infrastructure.

As an example, Accident Emergency Call Service systems (eCall) are prominent in European new vehicles due to regulatory requirements. However, these systems are not widely offered in new vehicles in Australia. There is no regulatory requirement in Australia, however the AAA understands that fundamental obstacles to Original Equipment Manufacturers (OEMs) offering eCall in Australia include the triple zero emergency call service not currently supporting eCall technology, as well as the

geographical size of and cellular coverage in Australia.

This example shows that while availability and standardisation of the technology might be the problem, supporting infrastructure is a core issue.

2. **In our table, have we accurately captured all the regulatory and legislative mechanisms government could currently use to access vehicle-generated data?**

The AAA considers the NTC has captured the regulatory and legislative mechanisms currently available.

3. **Are there other major local or international jurisdictional developments providing further access powers or arrangements for vehicle-generated data?**

Related to vehicle-generated data, work is underway on a proposal for a new UN Regulation on uniform provisions concerning the approval of vehicles with regards to cyber security and cyber security management systems.
https://www.unece.org/trans/main/wp29/meeting_docs_grva.html

The draft regulation requires manufacturers to adequately address cyber security through the development, production, and post-production phases. This regulation implicitly refers to connected vehicles.

This draft regulation currently does not introduce further powers for access to vehicle-generated data, however it will likely influence the frameworks and controls for the transmission of data to and from new vehicles. In turn, this may influence access to data.

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?**

The AAA agrees that the uptake of vehicle connectivity is low in Australia and that there are limited current government access arrangements for vehicle-generated data.

The discussion paper highlights that standardisation of technology is a factor affecting potential timelines for introducing connected vehicles. Road safety data for real-time events will likely require some form of standardisation to ensure appropriate and timely response and therefore successful use cases.

Trials provide an opportunity to examine the broad range of connectivity solutions and government applications as well as areas where standardization is necessary. The AAA supports technology trials by all levels of government to ensure technology applications are suitable for implementation in Australia.

5. **What issues do you believe will be created if ExVe is adopted and that would need to be considered in Australia?**

The AAA understands that while the Extended Vehicle server may facilitate data access to third parties approved by the manufacturer, it is possible (or even likely) that separate communication technologies will be offered in parallel; for example, to facilitate Cooperative Intelligent Transport System communication with the local infrastructure environment.

The AAA considers that a key point with respect to the Extended Vehicle concept is that access and flow of vehicle data is controlled by the manufacturer. It is reasonable to expect that terms and conditions of access to vehicle data, including associated fees, will be determined by the manufacturer. Similarly, it is reasonable to expect that, in the absence of mandatory requirements, communication interfaces

placed inside the vehicles will be unique to each manufacturer.

The AAA does share some concern surrounding competition issues in Australia associated with the Extended Vehicle server and access to vehicle data, particularly for the vehicle service and repair aftermarket.

The Federation Internationale de l'Automobile (FIA) Region I recently published a study focussing on access to in-vehicle data and proposed an alternative to the Extended Vehicle model.[4] The study targets the concern that OEMs are becoming data monopolists and proposes that access to in-vehicle data is administered by an independent and neutral third party, respecting the separation-of-duties principle.

This proposal demonstrates that an alternative, secure model is possible and offers benefits in the form of consumer choice and competition in the automotive aftermarket, as well as additional security and future-proofing features. The AAA believes that consumer choice and competition in the automotive aftermarket should not be restricted by access to vehicle data.

Separately, the Australian Government is currently progressing the design of a mandatory information scheme for motor vehicle service and repair information which may initially exclude Automated Driving Systems of level 3 and above (as defined by Society of Automobile Engineers Standard J3016). The platform for data exchange for connected vehicles must complement this regulation and support competition in the vehicle service and repair aftermarket.

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?

The AAA considers that a national approach is necessary to ensure consistency in any government access to data. An intermediary providing national consistency, with services covering multiple vehicle types and digital infrastructure, may help develop the necessary trust between industry, government and the community in the short term.

The recent study by the Federation Internationale de l'Automobile (FIA)[4] supports a single body or trust broker for access to in-vehicle data. The study proposes an independent and neutral body to administer the access to in-vehicle data, rather than the OEM, which is expected to offer additional community benefits by supporting both consumer choice and commercial competition.

Access by government to vehicle-generated information under any framework must be considered carefully, because it may not be possible to irreversibly de-identify the vehicle-generated data given they are likely to contain identifiers that could be linked with other government datasets.

With *personal information* broadly defined in the discussion paper as *being information about a reasonably identifiable individual*, the ability of vehicle manufacturers and other intermediaries to determine what data may be 'reasonably' identifiable may be limited by their understanding of what other datasets are available to governments.

In principle, the AAA sees potential benefit in a centralised national point for the ingestion and access of data. However, it is difficult to formulate a view when the details of such a model, including data type, volume, and latency, as well the costs and benefits are unclear.

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?

Various data access models and use cases will incur different costs and result in different benefits. The AAA agrees that it is difficult to quantify costs and measures of the broad use cases presented without a greater understanding of data access and sharing models.

The transmission of data is likely to incur significant costs depending on the size and amount of data, particularly where remote communication with vehicles is required. Cellular data networks are mentioned in the discussion paper and are currently offered in some new vehicles to facilitate remote communication. In some cases, this service is offered to consumers with a subscription fee.[5]

The possibility of costs being borne by the consumer, either directly via subscription or indirectly via maintenance or purchase cost, further reinforces the need for community communication and education to ensure the role of the consumer is properly recognised.

8. Are there relevant international standards that should be adopted for vehicle-generated data? Are there any standards that could be locally developed?

At present, a challenge in considering regulation or standards for government access to vehicle-generated data is the range of unknowns surrounding use cases and technological possibilities. Without an understanding of these issues, it is difficult to consider the development of standards.

The AAA considers that any regulation or standard must be appropriate and build consumers' confidence in access to their vehicle's data, without adding unnecessary regulatory costs – as these costs are ultimately borne by the consumer.

National and international consistency should be a priority and the AAA supports the adoption of UN standards. As the discussion paper notes, Australia is a technology taker with respect to light vehicles, and a unique Australian standard or regulation may increase the cost of regulation and present a barrier to the uptake of technology.

As a signatory to the UNECE 1958 Agreement, Australia is entitled to participate in the development of United Nations vehicle standards. The AAA recommends that Australia actively participates in the development of international standards to ensure their suitable application in Australia.

9. Have we accurately described the key barriers to accessing vehicle-generated data? Are there additional barriers?

Several barriers are identified in the discussion paper with uncertainty presenting as a common theme.

Consumer issues are discussed in the context of factors affecting whether users will opt in or opt out of sharing data. While the AAA agrees these are issues, the fundamental barrier to be addressed here is consumer acceptance.

Identifying consumer acceptance as the barrier would allow broader issues to be acknowledged, rather than focusing simply on consumer opt-in or opt-out rates.
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10. Do you agree that road safety data should be considered the priority purpose for which we seek to exchange data with industry?

The AAA supports road safety data being the priority purpose for government access to vehicle-generated data.

Road safety is a use case where vehicle-generated data is unique in that the data from vehicle sensors cannot be replicated or collected by other means. It also aligns with the international direction best demonstrated by the European 'Data for Road Safety' collaboration launched in June 2019 which prioritises access to safety data to enhance road safety for all road users.[6]

Furthermore, Australia's road toll presents a worrying trend with the number of fatalities relatively unchanged over the past 12 months, and road safety targets set out in the National Road Safety Strategy are being missed.[7] When considering government access to vehicle data, lives saved on our roads should be the priority.

However, in focussing on road safety as an initial priority, congestion and traffic management use cases should also be recognised as priorities to ensure that steps towards government access to road safety data complement these use cases.

11.   What are the key data needs of transport agencies beyond those already identified?

The AAA agrees with the NTC's assertion that, due to the status of technology and gaps in data not well understood, it is difficult to clearly define the priority needs of transport agencies at this stage.

12.   What further benefits from vehicle-generated data should be considered?
The paper discusses the benefits mostly in the context of one-way data transfer providing information to government. While consumer benefits may flow from this, the communication flow back to the user (vehicle driver) and the associated benefits appear to be overlooked.

The contribution of consumers in facilitating the generation of vehicle data must be properly recognised. As a stationary vehicle is of little value in generating data, the value of the data is dependent on the consumer's contribution. Therefore, direct benefits back to the consumer, for example through additional services or two-way data exchange, should also be identified. Identifying benefits that are valued by consumers may go some way towards building consumer acceptance and trust.

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?
The AAA supports the view that government access to vehicle-generated data should be built in a way that facilitates the further development of additional use cases, such as congestion and traffic management.

14.   Do you agree with the analysis presented in Table 7? What other opportunities are there for vehicle-generated data, and why?
Please see our response to question 12.

15.   Have priorities changed for land transport policy and for data access from vehicles with the onset of COVID-19?
The onset of COVID-19 has had significant implications for land transport in the short term, primarily in the form of reduced travel and mode shifts from public transport to private or active transport.

AAA member club RACQ has conducted a survey on stated preferences for travel modes during COVID-

19.[8] Overall, the net change results showed an increased preference for driving or being a passenger in a private car, a reduced preference for public transport – primarily bus and train/tram modes – and increases to preferences for cycling and walking.

Whether these stated preferences will translate to long term travel pattern changes is unknown, however they may extend at least to the medium term and begin to impact short-term prioritisation of land use and transport policies/projects.

Community sentiment towards the government's COVID-Safe app may provide valuable insights into the current rates of public acceptance with regard to sharing private/personal travel pattern. It may hold valuable lessons regarding what the public acceptability criteria should include – such as the ability to be independently evaluated by technology and cyber-security organisations to ensure data is protected.

The AAA considers that road safety remains the priority as we recover from COVID-19 and, given the barriers surrounding access to vehicle data (including low technology penetration), the priorities for access to vehicle data remain unchanged.

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?

Please see our response to question 10.

17. Can data other than for the purposes of road safety be exchanged on noncommercial terms?

The AAA considers that there is value in exploring further use cases where vehicle-generated data can be exchanged on non-commercial terms to maximise community benefit.

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?

The AAA considers that the NTC's approach to create a partnership to identify and develop use cases for the exchange of data between industry and government is appropriate, however it is not clear how consumer perspectives will be incorporated into this collaboration.

AAA polling, as outlined in previous sections, found that consumer awareness of telematics was low and that consumers believe they should have the right to control access to their data by third parties.

A key point made in the 2017 Productivity Commission inquiry into Data Availability and Use was:

Governments that ignore potential gains through consumer data rights will make the task of garnering social licence needed for other data reforms more difficult. Decoupling elements of this Framework runs the risk of limiting benefits to, and support from, the wider public.[9]

The AAA urges that consultation between industry and government on data access also include community consultation to support development, build community trust and technology uptake.

A core function of the NTC's preferred option should be to establish several safety focused data sharing trials and evaluate the costs and benefits. These trial results could then be shared publicly to provide examples of how data can be safely and securely managed while providing a road safety benefit to improve community trust.

19.   Does the NTC's proposed approach best address the problems we have identified? If not, what approach would better address these problems?

The AAA understands the approach of focusing on eCall to facilitate the embedded connectivity in new vehicles, however the proposed approach does not address the problem directly and relies on the successful rollout of eCall.

By focusing on a single service in eCall to unlock the broader benefits of connectivity, there is a risk that neither eCall nor the underlying objective of connectivity will be achieved as desired.

A regulatory approach requiring eCall-like services in Australia will necessitate a Regulation Impact Statement (RIS) and associated cost-benefit analysis. The key challenge with this approach is that the RIS will likely focus only on the costs and, importantly, benefits associated with eCall. It will not necessarily consider the benefits of connectivity more broadly, which appears to be the underlying goal. The AAA considers that, under this approach, the goal of increasing penetration of connectivity hinges on the benefit-cost analysis of eCall.

Furthermore, a key factor affecting the availability of eCall in Australia is the infrastructure. The AAA understands that the Australian Triple Zero emergency call service is not capable of accepting data packets sent by an eCall system as required by UN Regulation 144. This lack of supporting infrastructure is likely a key factor behind the low uptake of this technology in Australia.

With the proposed approach to increase the level of uptake of connectivity in Australia relying on the eCall service, the AAA suggests that further work is necessary to consider other additional supporting measures.

Footnotes

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[1] Federation Internationale de l'Automobile (FIA) Region I, *What Europeans Think About Connected Cars*, 2016.

[2] Royal Automobile Club of WA (RAC), 'RAC response to the NTC Discussion Paper – Government access to vehicle generated data', June 2020.

[3] Australian Government, *Data Availability and Use*, Productivity Commission Inquiry Report, March 2017.

[4] Federation Internationale de l'Automobile (FIA) Region I, *On-board telematics platform security*, June 2020.

[5] Tesla, Connectivity, https://www.tesla.com/en_AU/support/connectivity?redirect=no

[6] European Data Task Force, https://www.dataforroadsafety.eu/

[7] Australian Automobile Association (AAA), *Benchmarking the Performance of the National Road Safety Strategy*, May 2020.

[8] Royal Automobile Club of Queensland, RACQ COVID-19 Travel Behaviours Survey, June 2020.

[9] Australian Government, *Data Availability and Use*, Productivity Commission Inquiry Report, March 2017.