
FCAI Submission in response to NTC Discussion Paper – Government Access to Vehicle Generated Data



Federal Chamber of Automotive Industries
Level 1, 59 Wentworth Avenue
KINGSTON ACT 2604
Phone: +61 2 6229 8220
Facsimile: +61 2 6248 7673

Contacts:
Mr. Rob Langridge, Director – Emerging Technologies
Mr. Tony Weber, Chief Executive

July 2020

INTRODUCTION

The Federal Chamber of Automotive Industries (FCAI) is the peak industry organisation representing the importers of passenger vehicles, light commercial vehicles, and motorcycles in Australia. The FCAI welcomes the opportunity to make this submission to the National Transport Commission on the subject of “Government Access to Vehicle Generated Data (VGD).

FCAI strongly supports a collaborative approach for the development of rules and regulations surrounding the future introduction of advanced technologies where consumer, public and industry can all benefit from mutual cooperation.

FCAI member organisations are at the cutting edge of innovation, according to Boston Consulting Group 2019 Most Innovative Companies Report¹, six vehicle manufacturers are in the Top fifty most innovative companies. Vehicle manufacturers are expending extraordinary amounts of money on research and development to commercialise and introduce the latest technologies with advances that will bring quantum changes to the way in which new vehicles will interact with the environment providing innovative mobility solutions whilst enhancing safety for all.

Australia represents 1.062 million sales out of an estimated global production volume of 92 million vehicles in 2019 or around 1.1% and in fact the largest selling vehicle in the Australian market has sales of only 50,000 annually, it is therefore vital that we harmonise with overseas regulations. Global regulators and vehicle manufacturers are working to create standards and importantly timeframes for development and introduction of connected vehicle technologies that can significantly improve the safety of all road users including vulnerable users. This harmonisation will allow Australia to benefit from the advances occurring because of substantial global research and development into these challenging and difficult areas. By harmonising our Australian Design Rules 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 drivers will continue to enjoy the benefits of considerable competition that occurs through having one of the most open automotive markets in the world. In line with global regulators there are specific timelines and specifications for the introduction of these technologies and Australia should align where possible or appropriate.

The average age of the Australian vehicle fleet has been increasing and is now estimated at 10.2 years³. New vehicle sales as at June 2020 have seen 26 consecutive months of decline due to several economic and confidence factors. If new advanced vehicle technologies are to have a more immediate and significant effect on Australia’s road safety, governments at all levels will have to consider what policy measures may be required to:

- a) remove barriers to new vehicle purchases and;
- b) encouraging existing owners to switch to newer safer vehicles.

¹ <https://www.bcg.com/en-au/publications/2019/most-innovative-companies-innovation.aspx>

² FCAI - Vfacts

³ National Road Safety Strategy <https://www.roadsafety.gov.au/performance/measures>

At an average age of over 10 years, based on mandatory fitment, new vehicle technology advances will only penetrate the market to approximately 50% after 10 years.

It is important to point out that whilst connected vehicles and the ability to share data will undoubtedly have great benefits into the future it should be remembered that there are a great number of Advanced Driver Assistance Systems (ADAS) that are already released to the market. If we could modernise the Australian vehicle fleet to have more vehicles incorporating these systems, it could have a measurable, positive impact on road safety. Systems such as:

- Automated Emergency Braking (AEB)
- Lane Support Systems (LSS)
 - LSS could, on correctly marked country roads, avoid a large number of the single-vehicle run off road accidents that predominate in Australian rural accidents.
- Adaptive Cruise Control
- Forward Collision Warnings (FCW)
- Pre-Crash Systems (PCS)
- Blind Spot Monitor (BSM)

In addition to safety assistance technologies mentioned above, modern vehicles are designed with ever increasing levels of crash protection through improved adult occupant protection, child occupant protection as well as protection for vulnerable road users in the unfortunate event that a crash is unavoidable. This has the effect of reducing deaths as well as reducing the severity of injuries sustained.

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?

FCAI agrees that there is absolutely an opportunity for stakeholder collaboration on potential exchange or sharing of data for “road safety” purposes to understand:

- What vehicle generated data can be used to support road safety
- What an appropriate exchange framework and forum might look like to support such an exchange

The problem statements are correct in that vehicle generated data is not generally provided directly to transport agencies for purposes that may have publicly beneficial outcomes and there are a number of reasons for this that are not all captured by the statements, in addition to the NTC statements, FCAI believes there would be additional statements to encompass the breadth of problems that need to be addressed as follows:

1. Vehicle generated data is only useful if it can be transmitted beyond the vehicle and this requires vehicles to incorporate a level of communication connectivity and communication protocols which is not largely deployed in Australia. With no overarching principles, introduction will occur according to competitive market forces focusing on value-add factors that appeal to consumers.

2. Transport agencies in Australia have not yet developed an agreed vision or developed business cases of what vehicle generated road safety data they desire cognisant of the financial implications and alternatives, additionally we are not aware of plans released for infrastructure investment that might make use of vehicle generated data, although we note that Austroads is leading some work in this area.
3. Some limited VGD is already being made available through commercial arrangements with third party organisations, these companies typically aggregate data, providing data feeds that can be commercially obtained.

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

This question is better answered by the respective jurisdictions in the view of the FCAI.

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

FCAI agrees that NTC have adequately covered the major international jurisdiction arrangements.

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?

FCAI agrees with this statement which was supported by the limited survey undertaken by FCAI with high level results presented to NTC at the working group session earlier this year.

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

FCAI members and their parent companies are committed to ensuring customers are protected appropriately when driving their vehicles and considers that ExVE is the only safe alternative in providing access to the connected vehicle. ExVE ensures that the Cybersecurity attack surfaces to the vehicle are minimised. Connected vehicles have the capability to provide manufacturers and third parties a great opportunity to provide value add services to consumers through the sharing of data. However, this data sharing needs to be developed to the high standards that are currently undertaken by the automotive industry in consideration of the safety implications and risks involved in the development and operation of motor vehicles. Automotive manufacturers have embraced the benefits that can be provided to consumers on well-designed applications providing valued products and services that adequately consider the automotive operating environment, whilst most of these currently operate through the consumers smartphone it provides an indication of the collaboration for mutual benefit between

manufacturers, third party providers and consumers. Whilst there has been some comment of this concept, the automotive industry is working to address the issues raised.

FCAI believes that the real question is what issues and certainly what safety issues need to be considered should ExVE not be implemented in Australia. The ramifications could be profound and considerable, particularly in the areas of cyber security, privacy and road safety especially considering the issues surrounding driver distraction that could be exacerbated by inappropriately timed driver messaging. Driver distraction has proven to be extremely challenging even for experienced manufacturers and regulators globally.

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?

There is no definition of what a National Data Aggregator or Trust Broker actually is, and this definition is critical to responding to this question. However, FCAI does not consider that a National Data Aggregator or Trust Broker would be necessary at least initially and is only likely to increase costs for FCAI members as is and has been the case for other centralised authorities that Government has previously engaged bereft of competition. FCAI is of the view that with carefully designed data definitions and formalised legal agreements that such a National Data Aggregator would largely be unnecessary. As this is an area in development FCAI reserves the right to reconsider this aspect dependant on the agreements that are determined through the National Data Taskforce proposed. Should a National data aggregator be determined to be required, as a general principle FCAI is of the opinion that industry generated data is best managed by the industry rather than a third party with cost recovery or commercial interests.

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

FCAI believes that it is extremely premature to comment on costings at this stage for the provision of Vehicle Generated Data without substantially greater granularity of the detail.

The use cases at present are only high-level descriptors and do not specify specifics that would be necessary to undertake a cost evaluation such as but not limited to:

- Precise signals required,
- Definitions and code lengths of the signals,
- Sampling rates,
- Transmission rates,
- Storage requirements – on and off the vehicle

There are many requirements which would normally be developed through a data schema, the data transmission protocols need to be considered along with all the receiving and interpretation infrastructure.

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

It is important to understand that Australia is a net importer of motor vehicles. In 2019, around 92.6 million vehicles were produced worldwide, and Australian sales were 1.06 million vehicles representing around 1% of global demand and the largest selling vehicle in the Australian market commands around 50,000 sales annually, it is therefore vital that we harmonise with overseas regulations. Global regulators and vehicle manufacturers are working to create standards and importantly timeframes for development and introduction of connected vehicle technologies that can significantly improve the safety of all road users. Australia has benefitted significantly from harmonisation with European regulations in that the range of vehicles and advanced features available to the Australian motoring public has considerably increased.

The benefits of harmonisation have been realised in many areas and with vehicle connectivity FCAI recommends that we must again harmonise with the European Union and several standards have already been developed and implemented whilst enhancements are in the process of being trialled for implementation. Should Australia decide to consider developing unique Australian solutions, it is likely that technology deployment will be delayed or prevented, as it will not be feasible for manufacturers to develop these solutions for the small (by world standards) Australian new vehicle market. FCAI would direct the NTC to the extensive work undertaken by the European Union Data Task force.

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 by NTC were:

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

In addition to the above barriers identified by NTC, FCAI is of the opinion that there were several other barriers and some of the barriers mentioned above are unclear as per following:

- The compelling case for access to the data from a consumer perspective needs to be developed, articulated by Government, and debated in the public domain.
- The enormous scope of NTC considerations for VGD sharing being well beyond international norms and developments is creating resistance risks.
- Transport agencies have not yet agreed on use cases for VGD cognisant of costs and as a result there is lack of capability to ingest and use the data.

- Data not captured or stored – the capability to capture and store data is based on business cases, if there is a business case that is agreed, and as long as the data is available on the vehicles communication systems (Controller Area Network, CAN), then manufacturers can potentially make it available, although the difficulty in providing this data should not be underestimated.
- Manufacturers globally have demonstrated a general willingness to trial sharing essential “road safety” data however the sharing of this data needs to consider that there are various arrangements that may be required as follows:
 - Some VGD particularly that directly provided for an agreed definition of “Road Safety” could be on Non-Commercial terms as per EU 886/2013.
 - Some VGD could be shared on an exchange basis for mutually beneficial outcomes.
 - Some VGD could be shared on Commercial terms – particularly where transport agencies may be able to reduce current expenditure by utilising VGD – selecting the most cost-effective solutions for their needs.
- Costs to industry and governments was identified however it ignored the ongoing costs to **consumers**, there will be a need for data plans to transmit the data. Even if the vehicle is initially provided with a data plan, firstly the cost for this is factored into the vehicle cost and when this period has expired, consumers will be required to fund the ongoing data communication plans. If the following example were to be representative, no manufacturer has considered this level of mobile data transfer volume.
- If we assumed that:
 - The NTC referred to 4 terabytes⁴ of data/vehicle/day produced, if only 1/100th of that data was transmitted daily, then:
 - $4\text{Tb}/100 = 40\text{Gb}/\text{day} \rightarrow 1,200\text{Gb}/\text{mth}/\text{vehicle}$
 - Assuming a current business Telstra plan 180 Gb⁵ @ \$115/mth equates to:
 - $7 \times \$115 \text{ plans} = \$805/\text{mth}/\text{vehicle}$
 - If this were extrapolated to one year of vehicle sales in Australia⁶
 - $\$805 \times 12\text{mths} \times 1.06\text{m vehicles} = \text{approximately } \$10 \text{ billion}/\text{year}^7$
 - These costs are purely vehicle to infrastructure data transmission costs and do not account for:
 - vehicle hardware costs,
 - data aggregation / de-identification (if required / necessary)
 - data analytics
 - any other data management
 - Infrastructure to infrastructure transmission costs
 - data storage if required
 - excludes Government data management services.
- Of course, FCAI acknowledges that there will undoubtedly be considerable reductions in these costs over time and that commercial volume plans may well negotiate bulk discounts however,

⁴ NTC Discussion paper – Government Access to Vehicle Generated Data 3.2.2

⁵ <https://www.telstra.com.au/help/critical-information-summaries/business/mobile/business-mobile-plans/business-mobile-plans>

⁶ FCAI Vfacts Dec 2019

⁷ Figures have been rounded

this is likely to be somewhat negated by ever increasing data volume requirements as proposed by NTC.

- Please note. the above example is intended to highlight the imperative to understand what data is useful and for what purpose so that a business proposal can be created that appropriately evaluates the cost vs the benefit for all parties involved.
- Transport agencies individually manage the road networks and within these transport agencies they hold enforcement powers, this could be a barrier to data sharing that will be of concern to consumers and their decision to “opt-in”

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

FCAI agrees that “road safety” data should be considered as the absolute requirement and our members have in other international jurisdictions embarked on cooperative ventures to further develop understandings of mutually beneficial data sharing arrangements.

However, FCAI does not agree with the NTC’s concept of “Road Safety Data as a Priority” this concept implies many uses beyond “road safety” and is well beyond the scope of what has been considered in other international jurisdictions. As discussed during the workshops there needs to be a limited and clear definition of what constitutes “road safety”, in Europe they refer to defining minimum requirements for road safety-related universal traffic information services.

It is interesting to note that the NTC has proposed that VGD where there are publicly beneficial outcomes, this data should be exchanged on non-commercial terms. However, currently manufacturers are charged significantly for current consumer registration contact details in order to undertake vehicle safety recalls – FCAI considers that this data is only being sought for publicly beneficial outcomes; that is directly associated with improving vehicle safety and consequently road safety.

Given the above, FCAI contends that there is a need to develop some principles around the provision of VGD that needs to include:

- A precise definition of “road safety” for publicly beneficial outcomes?
- What is the principle of the costs incurred to provide the data?
- Should the primary beneficiary pay?
- Is there a difference between “road safety”, “vehicle safety” and “road infrastructure management and maintenance” and if so, what should the principles be for VGD involved in assessing each?

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

This question is better answered by the respective jurisdictions in the view of the FCAI.

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

Given that the paper is under the primary heading of Government Access to Vehicle Generated Data, FCAI will confine its responses to benefits from a Government perspective.

Should NTC's proposal for a Data Task Force to be implemented, there are numerous indirect benefits:

1. The data task force would determine the specifics of:
 - a. Messaging required
 - b. Data schemas
 - c. Frequency and sampling rates
2. Standardisation & alignment of messaging across State & Territory jurisdictions would have enormous advantages across industry and governments enabling efficiencies in:
 - a. Equipment required
 - b. Purchasing cost reductions
 - c. Potential flow on effects to C-ITS applications and infrastructure.

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?

Manufacturers globally have demonstrated a general willingness to trial sharing essential road safety data (Minimum Universal Traffic Information). The road safety related data subject to the European Data Task force and regulated under Safety Related Traffic Information (SRTI) delegated act, are provided on "at cost" basis. See Article 2(p) of (EU) No 886/2013: *"free of charge" means the provision of the road safety-related minimum universal traffic information service at no extra cost for the end users at the point of use only.*" however the sharing of VGD needs to consider that there are various arrangements that may be required as follows:

- Some VGD particularly that directly provided for an agreed definition of "Road Safety" could be on Non-Commercial terms similar to EU 886/2013.
- Some VGD could be shared on an exchange basis for mutually beneficial outcomes.
- Some VGD could be shared on Commercial terms – particularly where transport agencies may be able to reduce current expenditure by utilising VGD – selecting the most cost-effective solutions for their needs.

As principles:

- the use of "road safety" data is only to be used for its intended purpose – Further commercialisation would be explicitly excluded.
- The scope of data collected and provided "free of charge" or "at cost basis" should be kept to a minimum.

Finally as a general point, the use of vehicle generated data for other purposes other than what was originally agreed to would legally require consumer permission for that particular intended purpose, but as we may not know what it is at the time of vehicle sale, this poses considerable challenges for manufacturers and regulators to manage.

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 potential vehicle generated data that could be shared.

The vehicle industry has indicated its general willingness to trial sharing essential road safety data on non-commercial terms for broader public benefit.

The definitions of the data terms have not been defined in the work undertaken to date and therefore it is extremely premature to be considering agreement / disagreement with this table.

As an example, in Europe the following definitions refers to Event Data Recorders (reference Line 4 in Table 7):

1. The introduction of event data recorders storing a range of crucial anonymised vehicle data, accompanied by requirements for data range, accuracy, resolution and for its collection, storage and retrievability over a short timeframe before, during and immediately after collision (**for example, triggered by the deployment of an airbag**) is a valuable step in obtaining more accurate, in-depth accident data.

All motor vehicles should therefore be required to be equipped with such recorders. Those recorders should be capable of recording and storing data in such a way that the data can only be used by Member States to conduct road safety analysis and assess the effectiveness of specific measures taken **without the possibility of identifying the owner** or the holder of a particular vehicle on the basis of the stored data.

2. Any processing of personal data, such as information about the driver processed in event data recorders or information about the driver's drowsiness and attention or the driver's distraction, should be carried out in accordance with Union data protection law, in particular Regulation (EU) 2016/679 of the European Parliament and of the Council (6).

Event data recorders **should operate on a closed-loop system**, in which the data stored is overwritten, and which does not allow the vehicle or holder to be identified. In addition, the driver drowsiness and attention warning or advanced driver distraction warning should not continuously record nor retain any data other than what is necessary in relation to the purposes for which they were collected or otherwise processed within the closed-loop system.

Furthermore, the processing of personal data collected through the 112- based e-Call in-vehicle system is subject to specific safeguards set out in Regulation (EU) 2015/758 of the European Parliament and of the Council (7).

3. 'event data recorder' means a system with the only purpose of recording and storing critical crash-related parameters and information shortly before, during and immediately after a collision.

On the other hand, DSSAD for L3+ will be required to determine who was in control of the vehicle at the time of the incident.

Therefore, EDR and DSSAD have very distinct but related roles and yet in the table provided by NTC they have been joined. Additionally, under European regulations EDR cannot be used for enforcement purposes – yet this is stated in the table as a potential use for EDR.

The above is an example of how just one aspect of this table that is contradictory.

Throughout this discussion paper response and during the workshops, FCAI has requested a specific definition of “road safety”.

The table summarises manufacturers propensity to support various initiatives however until the definitions and detail are known it is impossible to indicate any levels of support.

FCAI suggests that the Data Taskforce could work through the implications of this table in some detail, commentary at this stage is somewhat premature and could easily be misinterpreted.

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

This question seems to be directed to Land Transport Agencies concerning policy prioritisation since the onset of COVID-19, however COVID-19 has had a significant economic impact on the Automotive Industry globally and therefore FCAI will comment from a manufacturers perspective as follows:

The impacts from the pandemic have been felt in the devastation of automotive sales numbers and therefore income for manufacturers who are funding the research and development of emerging technologies such as connected vehicles. In fact, during the height of the pandemic, many automotive companies altered production lines to support the global health community with the mass manufacture of essential medical equipment and supplies.

The economic impact is likely to result in some delay to originally proposed time frames for these advanced technologies as companies initially focus on core business and reduce or postpone their discretionary spending on R&D for these and other technologies.

Additionally, with the significant global mega trend towards Zero Emission Vehicles (ZEV) accelerated by various international Government announcements and regulatory timeframes, manufacturers are prioritising efforts to reduce or eliminate CO₂ emissions from their vehicles through a range of technologies.

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?

FCAI proposed during the workshops that a collaborative approach was required between Government and Manufacturers and that one of the first priorities was to develop a definition of what is “road safety”?

Without such a definition it is impossible to provide an answer to this question.

In Europe, the “Data for Road Safety” trial created a very specific definition, and this has enabled the parties to develop systems, guidelines and rules that are governed by a Memorandum of Understanding and some legal safe harbour provisions.

FCAI continues to support the general principles of a Safe Systems approach:

- Safe Roads
- Safe Vehicles
- Safe Drivers

There are many facets to each of these items and in the context of bringing the technology to market there is still a considerable need for:

- Public education
- Driver education

As stated previously FCAI, does not agree that use cases for network operations and infrastructure maintenance are or should be in scope at all for non-commercial access.

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

FCAI is concerned that NTC seems to be focused on “Non-Commercial” terms for the exchange of Vehicle Generated Data (VGD).

Motorists already contribute significantly to various governments and authorities to consolidated revenue through a broad range of taxes and charges:

- Import Taxes
- Luxury Car Taxes
- Registration Fees
- Congestion Fees
- Stamp Duties
- Fuel Excise
- Licence Fees
- Parking Fees

Within the discussion document NTC recognises that:

- *The value of commercial incentives will drive the development of more innovative products and services for transport agencies and the community.*
- *Many of the technologies that generate vehicle data are linked to features that have been added to vehicles to increase their safety and efficiency. Technologies including forward facing cameras and radars can enable automated braking or speed assistance systems as an example. But they also enable the vehicle industry to seek to commercialise data from these sensors. This increase is an incentive to deploy more safety equipment on-board the vehicle.*

Therefore, it would be useful for NTC to consider that there could be more Vehicle Generated Data (VGD) sharing if we considered that:

- Some VGD particularly that directly provided for an agreed definition of “Road Safety” could be on Non-Commercial terms as per EU 886/2013.
- Some VGD could be shared on an exchange basis for mutually beneficial outcomes.
- Some VGD could be shared on Commercial terms – particularly where transport agencies may be able to reduce current expenditure by utilising VGD – selecting the most cost-effective solutions for their needs.

Manufacturers aside from research and development, incur significant costs in implementing connected vehicles. In the first instance there is the on-vehicle hardware including Cameras, RADAR, LiDAR, GPS systems, along with a multitude of vehicle sensors and on-board equipment to manage the inputs as well as the communications equipment to transmit VGD. In addition, the VGD needs to be collected, transmitted, and stored as appropriate which involves considerable IT infrastructure, monitoring and management.

Manufacturers take their data collection and privacy responsibilities seriously, implementing careful procedures to ensure all elements of digital trust and compliance with Australian Privacy Principles are met or exceeded – all of these quality processes incur a business cost that must be taken into account when considering the overall cost/benefit analysis.

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?

FCAI recommends that Option 2: Government and industry data exchange partnership is the preferred option for the industry.

In addition to the partnership developing a shared vision and principles, there is a definite need to ensure a set of definitions is developed and agreed.

A Memorandum of Understanding (MOU) would be extremely useful to document the agreement on the fundamental understanding of National consistency across state and territory boundaries. The principles included in the discussion paper are very relevant and could be expanded on in the establishment of the partnership.

It will be important to ensure that the partnership is well constructed ensuring a balanced approach of membership.

FCAI recommends that the scope of this initial partnership be limited only to “road safety” data in a similar manner to that agreed to in overseas jurisdictions whilst considering the unique aspects of operating on Australian roads.

Of course, should NTC agree that there may be several suitable arrangements to consider VGD sharing such as:

- Some VGD particularly that directly provided for an agreed definition of “Road Safety” could be provided for on Non-Commercial terms as per EU 886/2013.
- Some VGD could be shared on an exchange basis for mutually beneficial outcomes.
- Some VGD could be shared on Commercial terms – particularly where transport agencies may be able to reduce current expenditure by utilising VGD – selecting the most cost-effective solutions for their needs.

FCAI considers that such a partnership could yield great benefit through the development of a collaborative approach with industry, transport agencies could outline the issue that they are trying to solve with members considering innovative methods of how the issue may be addressed – such a collaborative approach could be extremely beneficial.

NTC has suggested that a third-party data aggregator may support in the administration of the data exchange between manufacturers and government. FCAI is concerned as we have stated previously that at this stage such a national data aggregator may be unnecessary and simply add additional cost to manufacturers. As a general principle FCAI is of the opinion that industry generated data is best managed by the industry rather than a third party with commercial interests.

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

FCAI notes the NTC's recommendation to consider policy options for eCall (as in Eu) introduction as a method for increasing the uptake of connected vehicle services. Whilst eCall does provide a means of vehicle connectivity (some hardware and communication technologies), it does not necessarily lead to connectivity for other purposes. For the purposes proposed in this document eCall would at least require the addition of an ITS communication stack, applications and the necessary sensors to detect required events.

Additionally, if eCall or advanced eCall were to be introduced into the Australian market, the regulation should be technology neutral in relation to telecommunication standards necessary to transmit messages.

The FCAI generally agrees with NTC's proposed approach to develop a balanced data exchange partnership between industry and Government that will identify and develop use cases for exchange of data between industry and Government specifically for a minimum set of data directly associated with an agreed definition of "road safety".

We agree that the partnership could include the following features, however we consider that there are some crucial missing components to those outlined by NTC, and we would welcome further input to develop.

Partnership scope and establishing overarching governance

- The partnership would develop a shared vision and principles. A memorandum of understanding would establish the terms, members and governance of the working group and include any agreed principles.
- The partnership would develop a list of agreed definitions including "Road Safety"
- The partnership would develop an agreed understanding of vehicle-generated data categorisation⁸
- The partnership should also review overseas similar industry / Government arrangements, reviewing the results to evaluate what needs to be separately considered in Australia due to some unique circumstances.
- Principles could include:
 - achieving national consistency, particularly in relation to data definitions and standards
 - minimising that amount of data needed to achieve an outcome
 - focusing on information and insights over data
 - encouraging 'opt-in' to services
 - protecting sensitive data – either personal or commercial – ensuring anonymity.
 - ensuring data exchange is cognisant of the costs of provision.
 - ensuring that all avenues for sourcing similar data are considered (even if out of scope of the current NTC discussion paper).
 - all entities share similar obligations – public / private road operators and service providers
- The partnership approach would enable parties to make requests for data, on the basis of either sharing of data, exchange of data (which could include reciprocity) or other means to provide value to stakeholders.
- The scope of the partnership would be limited to VGD for an agreed definition of "road safety".

⁸ NTC Discussion paper Government Access to Vehicle Generated Data Table 7

Exchange obligation

- Both industry and Government parties may make requests for data, but there would be no obligation by any party to comply with any requests. A response outlining why the data request has been refused should also be provided and on what grounds it could be met.

Establishing and proving value

- Industry and Government may also consider trialling the exchange of data through a proof of concept to validate the value of data exchange.
- Successful proof of concepts will further inform the development of a framework for the exchange of vehicle-generated data for road safety between Government and industry.

Process and data governance

- Governance would be established by drafting legal agreements covering rights to access data. Existing agreements used in heavy vehicle telematics could be adopted as a starting point, as well as reviewing agreements developed in other international jurisdictions.
- Transport agencies would develop draft problem statements, underlying data requirements, assessment of alternatives and potential benefits to be discussed and further developed with industry.

Legal Protections

- Legal agreements will need to be drafted for any agreed trials which need to consider “Safe Harbour” provisions for the duration of any trial or evaluation period.
- All participants will be required to provide value to any trials.

Membership

- Membership would be voluntary and include Government and industry.
- At this stage, the involvement of an administrative entity such as TCA is considered unnecessary.
- It could also include other parties such as research and academic organisations, who may advise on other uses of data for road safety or contribute to the overall evaluation of exchanges.

Outputs

- We consider that the group once formed can determine the relevant outputs as a measure of their success.

CONCLUSION

FCAI welcomes the opportunity to work with NTC and governments at all levels to develop a balanced mutually beneficial road safety outcome from the use of minimum universal Vehicle Generated Data (VGD).

We encourage the NTC to consider that there are numerous pathways to access VGD as we have outlined in the document that consider:

- Some VGD particularly that directly provided for an agreed definition of “Road Safety” could be on Non-Commercial terms as per EU 886/2013.

- Some VGD could be shared on an exchange basis for mutually beneficial outcomes.
- Some VGD could be shared on Commercial terms – particularly where transport agencies may be able to reduce current expenditure by utilising VGD – selecting the most cost-effective solutions for their needs

Vehicle manufacturers are at the forefront of developing advanced technologies that can assist with resolving or improving a number of societal issues whilst providing increasingly safer products with the ability to monitor and interact with the operational environments whilst still providing the most convenient on demand transport solutions that meet the needs of Australian motorist's mobility and transport requirements.

Kind regards

Rob Langridge
Director – Emerging Technologies