

Geotab Submission to “Right to Repair.”

February 1, 2021

About Geotab:

Geotab is advancing security, connecting commercial vehicles to the internet and providing web-based analytics to help customers better manage their fleets. Geotab’s open platform and Marketplace allow both small and large businesses to automate operations by integrating vehicle data with their other data assets. As an IoT hub, the in-vehicle device provides additional functionality through IOX Add-Ons. Processing billions of data points a day, Geotab leverages data analytics and machine learning to help customers improve productivity, optimize fleets through the reduction of fuel consumption, enhance driver safety, and achieve regulatory compliance. Since being established in 2000, Geotab Inc. has grown from a small, family business to a global leader in solutions for fleet management and vehicle tracking. We are now one of the largest telematics outfits in the world and have become the first to surpass two million connected vehicles built on a single, open platform.

[View our Corporate Profile](#) brochure.

What is Right to Repair?

What would a ‘right to repair’ entail in an Australian context? How should it be defined?

Geotab believe’s an Australian ‘right to repair’ entails a mandatory scheme for the access to motor vehicle service and repair information.

Mirroring the trend toward digital transformation that is happening in other industries, vehicle diagnostics and repair are moving from the service garage to the cloud. Predictive diagnostic maintenance is already being done and is only possible when a continuous rich stream of vehicle data is available, for example, to aftermarket fleet management applications such as Geotab.

There is a persistent evolution of vehicle ownership towards fleets, and fleets participating in the sharing economy, e.g. rideshare programs. Vehicle manufacturers themselves are competitors to conventional car rental and fleet leasing companies in the sharing economy. Therefore, we recommend requirements for vehicle manufacturers to provide direct access to in-vehicle data for third parties.

We believe vehicle end users and the public are best served by expanded choice including third party innovative services that go well beyond vehicle diagnostics and maintenance. This future relies on access and use of all data generated by the vehicle today and any new vehicle data created in the future. Restricting third party access of vehicle data to only what OEM licensed service has access to, seriously impairs development of future services.

We also caution against too narrow a definition of “repairer” as many large commercial fleets rely on telematics service provider for predictive vehicle diagnostic and maintenance service – blurring the lines between conventional independent service garages, and virtual service garages where much of the vehicle diagnostics and some repair (OTA) are done.

Geotab recommends adding that some vehicle data and diagnostic tools may only be available from Tier suppliers to the OEMs. For example, calibration of cameras and other sensors in windshields and Lidar sensors can require calibration and diagnostics information directly available only from the Tier supplier.

The Commission's approach to the inquiry.

What types of products and repair markets should the Commission focus on?

Telematics devices which connect any vehicle's computer to the Internet, from passenger cars to HD Trucks, collect sensor and equipment data via open technology. Telematics devices work with mixed fleets and help extend their lifecycle. Powerful analytics help businesses make better decisions and improve operations, saving time and money. In addition vehicle-generated data allows businesses to monitor and maintain regulatory compliance requirements.

This data has become essential to advancing driver and road safety (e.g. seatbelt use, accident reconstruction, reducing fuel cost and greenhouse gas emission (fuel consumption, idling, "indirect" emission drivers such as tire pressure), and improved vehicle reliability and safety (predictive maintenance, warranty administration). Geotab services related to repair and maintenance include predictive maintenance through data analytic services.

Aftermarket telematics have been recognized as a key component of strategies aimed at reducing the climate impact of the transportation sector. We suggest consideration for standardizing electric vehicle data, as charging data is **critical**¹ to both vehicle owners and electrical utilities. However, EV's lack a regulated standardized diagnostics (data access) port location, and charging data is often intentionally obfuscated from third party access.

Are there common characteristics that these products share (such as embedded technology and software or a high/low degree of product durability), and which characteristics would allow policy issues to be considered more broadly?

Access to data of each individual vehicle is an indispensable prerequisite for market entry by telematics service providers like Geotab. Several of Geotab's services (such as its instant alerts and collision reconstruction services) necessarily require access to data from each individual vehicle of the customers' fleet.

Proper access to vehicle generated data enables vehicle owners and operators to collect and share data. It facilitates authorized service providers to access and utilize data to offer competitive products and services for today and create innovative models for smart transportation, smart communities and smart mobility as a service for tomorrow.

These requirements together support the equal abilities of independent service providers to provide effective competition in vehicle related services to vehicle manufacturers, but at the same time providing state-of-the-art security over the vehicle's lifetime.

Technical reasons for telematics service is limited due to the existing array of vehicle electrical architecture across OEMs and model years. Geotab is working with GENIVI and W3C to develop common vehicle signal (VSS)² specifications to address this issue and the GENIVI Common vehicle interface initiative (CVII)³.

The onboard diagnostic (OBD), systems and ports have become a staple feature of modern vehicles, offering owners, operators, regulators, OEMs and service providers vital information regarding emissions, safety, emergency, maintenance status and other mobility topics. Access to vehicle information has become increasingly important and valuable.

¹ <https://arena.gov.au/projects/realising-electric-vehicle-to-grid-services/>

² [https://www.w3.org/auto/wg/wiki/Vehicle_Signal_Specification_\(VSS\)/Vehicle_Data_Spec](https://www.w3.org/auto/wg/wiki/Vehicle_Signal_Specification_(VSS)/Vehicle_Data_Spec)

³

https://at.projects.genivi.org/wiki/download/attachments/40402952/CVII_Scoping_Document_22Sept2020v2.pdf?version=1&modificationDate=1601364460000&api=v2

One particular topic that especially concerns mixed brand fleet owners, operators and managers is whether OBD ports will remain open and available for add-on diagnostic and telematics devices and services like Geotab's. Legacy vehicles should be covered to the extent the vehicle make and model exposes vehicle data on the OBD port, and collects data via OEM on-board telematics. Geotab has investigated the "richness" of OBD port data collected by vehicle make/model, year, and geography over time.

OEMs hold the dominant position to set prices and limit the ability for independent business models to offer competitive services. This lack of data or standard access method (On ICE and EV) hinders interoperability across legacy vehicles, as well as obstructs visibility for utilities on carbon attribution. Closing the OBD ports would thus constitute an exclusionary abuse of a dominant position.

Consumer

Is the guarantee of available repair facilities and spare parts effective in providing access to repair services and parts?

Vehicle architecture is getting more secure with newer technologies, OEMs implement proprietary means of rights and roles thereby completely deciding who gets access to what within the vehicle architecture, implementation of gateways with access control mechanisms and limiting access to ISPs only to a few architectural elements of the vehicle.

OEMs can implement security controls and restrict access via the OBD port. Independent aftermarkets need the right to offer their apps and services also for these environments to be able to compete with OEM offerings on equal terms.

Are consumers sufficiently aware of the remedies that are available to them, including the option to repair faulty products, under the ACL's consumer guarantees? If not, would more information and education be a cost-effective measure to assist consumers understand and enforce guarantees?

Operators of commercial vehicles, the one interest group who will likely be the most impacted by data control decisions, are beginning to engage in this dialogue. Independent, owner-controlled access to vehicle generated data is an important "check and balance" in the interest of a transparent and competitive transportation economy. The risk that commercial vehicle operators should be aware of is simple: they may wake up one day and discover that their access to their business operations data is severely limited and, at that point, there may be very little they can do about it.

Independent data access by different stakeholders in the transportation ecosystem helps provide transparency and accountability when it comes to measuring and reporting data on emissions, fuel consumption, repair and maintenance and other vehicle operation parameters. It should be welcomed by all stakeholders who value a level competitive playing field - including vehicle manufacturers.

Repair Markets

The Commission is seeking information on the nature of repair markets in Australia, including detailed data on the repair markets for specific products, covering: market size; market composition.

Today, there are about 19.8 million vehicles in operation in Australia. Of these vehicles, the owners of these vehicles, particularly the ones used for commercial purposes, rely on real-time, wireless access to operational data generated by their in-motion vehicles for running an efficient and responsible business. The data and related insights can be used to:

- Promote safe driving behavior (e.g. monitor seat belt use and vehicle speed)

- Maintain vehicles (e.g. detect engine problems and monitor battery life)
- Improve efficiency and productivity (e.g. route planning and adjusting, measuring and managing fuel consumption)
- Comply with regulations (e.g. manage [Electronic Work Diary](#), and the [intelligent access program](#)⁴)
- Access fleet-related services competitively (e.g. used car dealerships and/or independent repair garages, competitive insurance offerings, etc)

Is there any evidence of a difference in quality, safety or data security between authorised repair networks and independent repairers? Are there ways to address concerns around quality, safety or data security while promoting a vibrant independent repair market?

OEMs should not cite security and safety as rationale for closing access to in-vehicle data whether the vehicle is in motion or not. Several OEMs have designed gateways and other features into their vehicles that permit safe access via the OBD port to aftermarket telematics providers, by following for example recommendations in [SAE J3138](#) Diagnostic Link Connector Security⁵. OEM's should embrace tolerant OBD port designs rather than expect to block access to vehicle data and cite security/safety as a rationale for restricting access to vehicle data.

Furthermore, according to [Dr. Dan Massey's EU testimony \[video link\]](#)⁶, open vehicle security systems can provide greater cybersecurity, as opposed to those that are closed, or rely on obfuscation for security.

Fleet managers face significant challenges when operating mixed fleets, with multiple OEMs, vehicle models and years. Each vehicle has varying levels of data architecture, data formats, parameter sets, and access, making it increasingly difficult to develop standard data practices across mixed fleets. So, upfront, it is difficult to define what data points you can collect/retrieve from the vehicle.

The Geotab safety and security of telematics services is set out in the [Technical and Organizational Measures Statement](#)⁷ as well as the [Geotab Privacy Policy](#)⁸. This [Geotab Product Integrity White Paper](#)⁹ outlines some of Geotab's device design requirements and features that provide increased efficiency in vehicle fleet management, and importantly with Geotab advanced telematics systems improve the safety of the fleet vehicle operation. This technology is delivered via the GO device, which plugs into the vehicle engine bus communication infrastructure.

What is the relationship between the intensity of competition in the primary product market and the risk of consumer harm from a lack of competition in repair markets? Can competitive primary markets compensate for non-competitive repair markets?

Vehicle generated data needs to be readily available also by third-party devices. On the contrary, at the moment the data and resources needed for innovative business cases are not offered to aftermarket providers. Access is limited to OBD on ICE vehicles, thus leading to real-time computing and a minimal set of data for each and every OEM. A latest analysis for cross-OEM availability revealed that exactly one read-only data point and the mileage would be available across OEMs.

⁴ <https://www.nhvr.gov.au/road-access/access-management/intelligent-access-program-iap>

⁵ <http://profiles.sae.org/tevds20/>

⁶ <https://www.neutralvehicle.com/#new-video-content>

⁷ <https://docs.google.com/document/d/1b8F7XB86Z0h8xyD4GF3wH3vzwtzdMhKb-SmhYkz8IGs/edit#heading=h.uk8r0k8xx328>

⁸ <https://docs.google.com/document/d/1sVygLN02w2xNovFY4q5vw-oAzfYxCd7WLhyToElgDbs/pub>

⁹ <https://docs.google.com/document/d/10BjHVa3WkBBYndJ5SEYkFWRqu-9WzUgLJrExHNyaaus/edit#heading=h.ahq8lyk0866>

The number of OEMs for multi-brand mobility services might be limited, but they are the most relevant, especially with their evolving technical advantage for new repair and maintenance information features as the foundation. They have a privileged position and this is expected to increase. Independent mechanic garages providers are denied access to the needed technical resources. In the future, with EVs needing less maintenance, OEMs become even more of a competitor for similar services our industry is offering.

These limits on access increase the costs and capacity for consumers and independent garage providers ability to select the right parts required for repair. Simply, we believe it is more efficient for consumers and the market if service garages have the fair and appropriate access vehicle generated data.

To what extent would measures that enhance competition in the primary market address concerns about a lack of competition in repair markets?

In general, the number of independent competitors is small. The biggest competitor for the aftermarket is the current oligopoly by restricting access to vehicle generated data. This affects future mobility network solutions and its network of insurers, garages, diagnostics, rental cars and roadside assistance.

In addition, many potential competitors are eliminated because without both access to in-vehicle data and a common data interface, more niche players cannot provide their services for example, a start up a reservation company for rideshare can not integrate their services without a standard interface and access to data. Unfair practices occur more regularly due to the increasing use of encrypted signals and gateways. This is done to prevent lawful reverse engineering to acquire data access.

What policy changes could be introduced if there is a need to increase competition in repair markets and improve consumer access to, and affordability of, repairs?

From our perspective, any policy changes should highlight the need for non-discriminatory, direct data access to vehicle-generated data as a necessary underpinning for competition, innovation, and value creation. Implementation details can be left to an industry body provided all stakeholders are equally represented. To adopt an open, standardized, global data platform that is accessible to all stakeholders will become a vital underpinning of global transportation and mobility.

Intellectual Property

To what extent do current IP laws already facilitate repairs by consumers or independent third parties (e.g. the spare parts defence under the Design Act)?

Each OEM holds a dominant position on the product market for OBD port access to real-time data of vehicles made by such OEM, given the powers a manufacturer has based on design choices and intellectual property laws.

Taking into account that the market is evolving fast and competitors change over time, technical standardization will help, especially for multi-brand services. However, we need to be always making adjustments possible to adapt to future market changes. This includes an effective Human-Machine Interface model to be in place where every third party app runs on every vehicle brand.

Technically, a degree of standardization will help, especially for multi-brand services (See success of Apple/Google where every apple Google app runs basically on every Apple/Google phone). From a regulation standpoint, we need a faster control mechanism to ensure that prices, terms and conditions, data/function and security standards are always kept up to date following market and technical evolution.

The [Secured Vehicle Interoperability \(SVI\)](#)¹⁰ enables secured access to vehicle data and bi-directional communication with vehicle:

1. [ISO/PRF TS 21184: Cooperative intelligent transport systems \(C-ITS\) – Global transport data management \(GTDM\) framework](#);¹¹
2. [ISO/TS 21177:2019 - Intelligent transport systems – ITS station security services for secure session establishment and authentication between trusted devices](#);¹²
3. [ISO/TS 21185:2019 - Intelligent transport systems – Communication profiles for secure connections between trusted devices](#).¹³

Are there any aspects of IP laws where consumers' rights with respect to repairs are uncertain?

As electric vehicles charging data becomes more critical to vehicle owners and utilities consideration must be given standardized data formats and points of connectivity. Electric vehicle charging services use vehicle usage data to identify opportunities to replace ICE with EV based on utilization, and overall life cycle cost to consumer, and inform optimization of type and location of required charging stations. Data for electrical utility load balancing for charging vehicles: connect utilities to EVs to optimize utility load balancing and reduce the cost to the consumer. EVs have varying physical access methods: location, or existence of access port. Often charging data is intentionally obfuscated from their party access. This lack of data or standard access method (On ICE and EV) hinders interoperability across legacy vehicles, as well as obstructs visibility for utilities on carbon attribution.

Do current IP protections (e.g. intellectual property rights, technological protection measures, end-user licencing agreements) pose a significant barrier to repair in Australia?

In the US and EU, the vehicle identification numbers ([VIN](#))¹⁴ is an important accessible data point. However, this is not always the case in Australia, VIN information is regularly a missing signal. VIN data enables fleets to easily determine which vehicles they are looking up, and also to cross-reference with their own internal records should the need ever arise.

In what ways might the government facilitate legal access to embedded software in consumer and other goods for the purpose of repairs? What are the pros and cons of these approaches?

The more the vehicle acts like a platform, the more it enables vehicle owners and operators to collect and share data. It should facilitate authorized service providers to access and utilize data to offer competitive products and services for today and create innovative models for smart transportation, smart communities and smart mobility as a service for tomorrow.

Any government mandate should tackle specificities of platforms in vehicles. In fact, from a regulation standpoint, we suggest a faster control mechanism to ensure that prices, terms and conditions, data/function and security standards are always kept up to date following market and technical evolution.

This could be achieved through a dynamic governance proposal in which the legislature only enshrines general principles of "equal access to technical progress with equal rights and responsibilities" in legislation while this entity developed and constantly updates the details over time (e.g. on a yearly basis) from enhancing the list

¹⁰ <https://www.svi-for-mobility.org/>

¹¹ <https://www.iso.org/standard/70057.html>

¹² <https://www.iso.org/standard/70056.html>

¹³ <https://www.iso.org/standard/70058.html>

¹⁴ https://vehicleidentificationnumber.com/international_vin_number_information/australian_vin_number_check.html

of standardized data and functions over new mandatory security standards up to new maximum prices for app validation (see example of roaming prices).

This dataset must include data that allows us to deliver our services (excluding access to data categories reserved for OEMs proprietary R&D and safety-related e.g. emissions, type-approval). This data needs to be subject to updates (e.g. quarterly or yearly review) by an independent commission. Legislation should set no limitations on retrieving vehicle data for the legitimate owner of the vehicle (with all due anonymisation if needed).

In order to facilitate real time, authorized, bi-directional communication, we strongly support legislation mandating standardised interfaces. One use case enabled by this is on-board pre-processing of data. Once in-vehicle access is guaranteed, it can be complemented by secured access via an open integration capability (e.g. web APIs). Standardisation could be at the physical interface level (OBD/USB), wireless and also software interface level. Data protocols should be standardised (e.g. VIS, VSS, etc.). Initial requirements should be established in legislation and may be managed dynamically over time, also through a system of dynamic governance.

Independent aftermarket operators who may not want to have an OEM server-based solution, as in vehicle pre-processing without aggregation by the OEMs is required. This is also true for reasons of direct consent management and commercial contact with our own clients.

To keep good hardware (the vehicle) operating with current technology, a platform would need to be regulated by the government and be required to adhere to stringent standards in safety critical areas. A defining feature would be that owners and drivers of those vehicles would have maximum freedom to choose when and how to upgrade components and software (compliant with safety standards); that platform would enable coexistence of traditional long lasting components, such as the engine and the body of the car, and features that are rapidly changing, such as infotainment consoles and automated driving systems. As influenced by [Open Cars](#)¹⁵, Lothar Determann.

Obsolescence

What evidence is there of planned obsolescence in Australian product markets? Do concerns about planned obsolescence principally relate to premature failure of devices or in them being discarded still working when more attractive products enter the market?

The vehicle should be designed to be fault tolerant of what can be reasonably expected to occur during its life and use. As such, the capability to upload apps to the vehicle should not be able to have a serious adverse effect on the safety and/or reliability of the vehicle.

In scenarios where [Common Vehicle Interface Initiative \(CVII\)](#)¹⁶ and secured interoperability is in place, the marketplace will quickly assign prices to relative contributions of value provided there is open, transparent choice for access and use of in-vehicle data. A standardized, open, global data platform that is accessible to all stakeholders will become a vital underpinning of global transportation and mobility.

How does planned obsolescence affect repairers, consumers and the broader community in Australia?

New vehicles need to be designed for upgradability that allows vehicle owners to update software which can extend the life of a vehicle. Business owners and fleet managers can use a hardware asset much longer than

¹⁵ https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2837598

¹⁶ <https://mobex.io/webinars/why-automotive-suppliers-and-data-focused-companies-need-a-common-vehicle-interface-initiative/>

software. In some cases the greenest car is the one already on the road when older model vehicles equipped with modern capabilities, such as aftermarket services, improve performance.

Aftermarket telematics allow use of certain assets at the same modern technological capabilities, avoiding being discarded as outdated hardware. Fleet managers will always need to integrate older and newer vehicles into the same system. Telematics supports interoperability and transparency which help extend the life of the asset.

Do consumers have access to good information about durability and reparability when making purchases? If not, how could access to information be improved?

Many new EVs (but also ICE vehicles) are provided with maintenance included in the purchase price. Maintenance and coverage of costs is managed via the importer, exclusively for affiliated brand channels. Crediting these costs is difficult and not transparent. Software updates can often only be executed by an OEM garage. Equipment to perform this is often too expensive for non-OEM garages to afford.

In case of new electric vehicles, OEM requirements to perform a repair might be quite strict about isolating the vehicle from any electrical source. If the workshop is small, it is not feasible to live up to this requirement. Established EV OEMs are very restrictive about which workshops are qualified to repair these cars.

New models need to go to an OEM dealer to properly switch off a diagnosis alert in the dashboard because the diagnosis machine of the independent garages lacks the corresponding update. This is not only applicable to EV but also to ICE vehicles. Problems occur with resetting the warning/dashboard error coding lights even for regular services. This is because the last version of software was encrypted by OEM.

E-waste

Geotab is focused on helping preserve the earth's natural resources through continuous innovation as well as the efficient use of materials in our daily operations. Geotab's GO Device helps customers reduce emissions by directly reading the fuel used from the on-board computer for multiple fuel types including: gasoline, diesel and electric.

GHG emissions can then be calculated by applying the associated carbon emissions conversion factor to the amount of fuel used, and can be monitored for any reporting period. Additionally, the GO device is capable of determining real idle time and its respective idle fuel used. Geotab also has the best coverage of electric vehicle makes and models, with the ability to support rich EV data, including: electric energy use (charging energy added, driving energy used), state of charge, charging status, and charge assurance dashboards. Furthermore, Geotab offers a free electric vehicle suitability assessment tool for fleet customers to identify best-fit EV replacements.

Each GO device undergoes a variety of tests to certify the device; can be recycled effectively, causes minimal damage to the environment and ensures the materials used are not harmful to users. Each GO device is RoHS, WEEE and Reach certified. In addition, Geotab follows the SAE 1455 protocol that tests the device under extreme conditions which helps determine its durability. The less prone the device is to damage.

Geotab won the 2017 GreenFleet Award in IT Innovation for developing technology that supports fleet sustainability and efficiency. The GreenFleet Awards recognize organizations that have successfully adopted low emission vehicles and innovative fuel saving solutions, along with manufacturers and innovators of low carbon technologies. Further information on Geotab's concerns around sustainability can all be found [here on our sustainability site](#), and in our [Environmental Code of conduct](#).

Potential Public Policy Measures

What policy reforms or suite of policies (if any) are necessary to facilitate a 'right to repair' in Australia?

We suggest any legislation highlight the need for non-discriminatory, direct data access to vehicle-generated data as a necessary underpinning for competition, innovation, and value creation. Implementation details can be left to an industry body provided all stakeholders are equally represented.

Are there other international policy measures or proposals that the Commission should consider as part of this inquiry?

Car manufacturers and dealers are required by law, regulations and regulatory expectations to enable car owners, operators and service providers to access OBD ports and information. For example, under California law and Federal regulations,¹⁷ cars must come with OBD ports for smog testing.

According to Art. 61 et seq. and Annex X of [EU Regulation 2018/858 of 30 May 2018](#)¹⁸, manufacturers have to equip cars with open OBD ports to qualify for type approval and they must "provide to independent operators unrestricted, standardized and non-discriminatory access to vehicle OBD information, diagnostic and other equipment, tools including the complete references, and available downloads, of the applicable software and vehicle repair and maintenance information. Information shall be presented in an easily accessible manner in the form of machine-readable and electronically processable datasets. Independent operators shall have access to the remote diagnosis services used by manufacturers and authorised dealers and repairers." (Art. 61[1]). "For the purpose of vehicle OBD, diagnostics, repair and maintenance, the direct vehicle data stream shall be made available through the serial data port on the standardised data link connector specified (...) When the vehicle is in motion, the data shall only be made available for read-only functions." (Section 2.9 of Annex X).

Furthermore, Annex X, Section 2.9 of EU Regulation 2018/858 expressly states that OBD ports must be accessible also when the car is in motion:

"For the purpose of vehicle OBD, diagnostics, repair and maintenance, the direct vehicle data stream shall be made available through the serial data port on the standardised data link connector specified (...). When the vehicle is in motion, the data shall only be made available for read-only functions."

The United States [Magnuson-Moss Warranty Act](#)¹⁹, a statute passed in 1975, makes it illegal for companies (including vehicle manufacturers) to void a warranty or deny coverage under a warranty simply because an aftermarket part or service has been used. The FTC (who enforces the Act) has said that the manufacturer or dealer must show that the aftermarket equipment caused the need for repairs before denying warranty coverage.

The European Commission has likewise provided guidance that vehicle manufacturers cannot limit their warranties on the condition that the vehicle is being serviced within authorised workshops or on the exclusive use of spare parts sourced from the OEM or its authorised network. The principle that use of aftermarket parts and

¹⁷ www.epa.gov/state-and-local-transportation/vehicle-emissions-board-diagnostics-obd

¹⁸ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32018R0858>

¹⁹ <https://www.ftc.gov/enforcement/statutes/magnuson-moss-warranty-federal-trade-commission-improvements-act>

services cannot in and of itself void a warranty is well established and supported by rulings from competition authorities and court decisions. This principle also applies to aftermarket telematics.²⁰

In South Korea, under the [Motor Vehicle Management Act](#)²¹ ("MVMA"), motor vehicle manufacturers or importers ("Manufacturers") must provide vehicle owners with a mandatory warranty for any defect. There is no provision allowing an OEM to deny warranty coverage simply by stating that the car buyer used an aftermarket product, e.g., a telematics plug-in.

Lastly, November 3, 2020, Massachusetts voters approved 75-25, Question 1, the "[Right to Repair Law](#)" [Vehicle Data Access Requirement Initiative](#)²². Massachusetts "Right to Repair," which would make it easier for independent auto mechanics to access the wireless data system to retrieve repair-relevant telematics data via smartphone apps. As a result, automakers would be required to create a platform for accessing telematics information beginning with model year 2022.

²⁰ www.ptolemus.com/insight/obd-dongles-and-oem-warranties/

²¹ https://elaw.klri.re.kr/eng_service/lawView.do?hseq=42015&lang=ENG

²² [https://ballotpedia.org/Massachusetts_Question_1,_%22Right_to_Repair_Law%22_Vehicle_Data_Access_Requirement_Initiative_\(2020\)](https://ballotpedia.org/Massachusetts_Question_1,_%22Right_to_Repair_Law%22_Vehicle_Data_Access_Requirement_Initiative_(2020))