Mandatory Motor Vehicles Scheme
Market Conduct Division
The Treasury
Langton Crescent
PARKES ACT 2600

Submitted by email: repairinfo@treasury.gov.au

Bosch welcomes the opportunity to submit to The Treasury concerning the Motor vehicle service and repair information-sharing scheme.

Bosch Automotive Service Solutions Pty Limited is a subsidiary of the Bosch Group (Bosch). Headquarters in Germany, Bosch is the global leader in the development, manufacture and supply of connected, automated and electrified products and services to the global automotive industry with overall sales of over A$ 80 billion in 2019.

In Australia, Bosch undertakes various activities from advanced design and engineering for Autonomous Vehicles Controls, to the development of diagnostics and calibration software, together with the supply of equipment for vehicle diagnosis and safe calibration of Advanced Driver Assistance Systems (ADAS) to Motor Vehicle manufacturers and the Independent Aftermarket sectors.

At Bosch we are motivated by the desire to develop products that are "Invented for life," that spark enthusiasm, that improve quality of life, and that help conserve natural resources.

We work with a range of industry stakeholders such as Motor Vehicle manufacturers, Industry Associations, Insurance Companies and Government Bodies to provide input on future standards and best practices to provide innovative solutions for the economical, safe repair and maintenance of modern motor vehicles systems.

29 January 2021
If you have any questions or require further information please do not hesitate to contact John Bright, General Manager, Bosch Automotive Service Solutions at

Yours sincerely
Robert Bosch (Australia) Pty. Ltd

Gavin Smith
President
Our submission for the Motor vehicle service and repair information-sharing scheme focuses on the following concerns and recommendations that we believe should be considered in the final Legislation.

1. **Overall Scheme:**
   As a preface to our input, we would like to outline the following fundamental market differences and requirements that we believe directly relate to the success or failure of this legislation.

   **Vehicle Manufacturers (VM)**
   A VM is generally focused on creating the necessary repair and service information for their brand(s), to enable an effective solution for the repair of its vehicles by its dealer network. The key groups of service and repair information relate to;
   - Diagnostics Software and Hardware (i.e. Vehicle Communication Interface or VCI)
   - Repair and Maintenance information
   - Special service tools and workshop equipment
   - Vehicle software updates

   The different groups are not independent of each other but are specifically designed to work together as part of a repair system to cater for the vehicle's technology and architecture.

   **Independent Aftermarket Workshops (IAM)**
   An IAM workshop is generally focused on repairing all brands of vehicles. IAM workshops use similar groups of repair and service solutions, however primarily only use solutions where all brands can be repaired with a Multi-Brand tool or a service provider. For similar diagnostic software and hardware, the IAM workshop will generally purchase diagnostic software and hardware including a Vehicle Communication Interface (VCI) that can be used on most vehicle brands.

   **Key Point:**
   The draft legislation focuses on the OEM providing their brand-specific service and repair solutions for the IAM repairers and RTO's, however, Bosch's view is that generally, no IAM workshop will purchase these solutions as they are economically prohibitive for a multi-brand workshop. As an example an OEM's diagnostics software, hardware can cost its dealer in the vicinity of between 10-20 thousand dollars. For an IAM workshop to cover the main vehicle brands that would mean an investment of 100,000+ dollars plus annual subscription fees vs the current approach of a single multi-brand tool at a fraction of the costs (ca. <10 thousand dollars).
At the same time the draft explanatory memorandum specifically excludes the provision of OBD, diagnostics, repair and maintenance information to tool manufacturers like Bosch in order to provide IAM repairers and registered training organisations (RTO) with multi-brand solutions using vehicle manufactures data. Data should be made available promptly in form of bulk data that can be edited and include necessary Meta information, e.g. about the version of drawings, updates, etc. This is especially necessary for electric vehicles that are safety-relevant for mechanics (>400V). The opinion of the explanatory memorandum suggesting OEM data licensing already exists in the Australian Market is in our opinion inaccurate.

Bosch believes the extending of OBD, diagnostics, repair, and maintenance information to the needs of Tool Manufacturers is an economical and effective solution for the IAM repairers and their customers-the consumer, whilst simplifying and reducing the cost for the OEM to provide such data is the logical approach. This would then also be in-line with legislation as it is in the European Union (EU).

Primary Recommendation:
Incorporate similar articles as per EU legislation to allow for the provision of information as found in Regulations EC No. : 715/2007, 692/2008, 595/2009, 858/2018 and include also the upcoming delegated act that is in preparation by EU.

Specific references are shown in item 2 and Appendix A

2. OBD, diagnostics, repair and maintenance Information (Scheme Information):

Reference @25

Bosch would propose to amend and or incorporate the primary definition of “Scheme Information” as referenced in the EU:

In reference to European Union (EU) Legislation:

Article 61:
Manufacturers' obligations to provide vehicle OBD information and vehicle repair and maintenance information

1. Manufacturers shall provide to independent operators unrestricted, standardised, 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. Manufacturers shall provide a standardised, secure, and remote facility to enable independent repairers to complete operations that involve access to the vehicle security system.

2.1 Security Information

In terms of Security Information, there are many Data Providers other than Vehicle Manufacturers or Providers of OBD, diagnostics, repair, and maintenance information who currently provide security information in the market. To ensure the safety and security of consumers it is important that the scope must extend to all Data Providers, not just the Vehicle Manufacturers or those companies that prepare information for them for security information.

Example:
Some Asian companies active in the Australian market provide tools with software to access, read and or reset security systems of vehicles (eg. accessing security-sensitive information including key codes, PIN’s, performing immobilizer reset, immobilizer EEPROM reprogramming). The origins of the software are unknown, the sales and use of such tools are presently unchecked, leading to risks for the safety and security of consumers.

Recommendation:
Implement new section @25

For OBD, diagnostics, repair, and maintenance information relating to Security Information concerning OBD, diagnostics, repair, and maintenance information of vehicles prepared by or provided by any Data Provider for use or training in conducting diagnostic, servicing or repair activities on those vehicles, as supplied to the market.

2.2 Secure Gateway Access and Access Algorithms and Encryption

Many vehicle manufacturers have adopted security measures as part of cybersecurity strategy to prevent hacking and unauthorised access to vehicle Systems access. These can be in various forms such as an authenticated access, Seed & Key encryption, or Algorithm...
To access various systems in vehicles equipped with such protected access, provision of access to in-vehicle data and resources is necessary, without access it would not be possible to diagnose and or repair the vehicle sufficiently. This access must be used together with various tools and communication devices.

**Recommendation:**

*Implement new section @25*

**Special Conditions**

**Secure Gateway Access and Access Algorithms and Encryption**

Provision of cybersecurity authentication, encryption algorithms only form part of OBD, diagnostics, repair and maintenance information for vehicles, as far as the provision of using the Vehicle Manufacturers Software and Hardware and Authentication systems, and or any other tool provider that can fulfill the necessary technology and security measures to protect such systems.

**3. Safety Information:**

*Reference @35 (2)*

Specifically for Safety Information, Bosch has concerns regarding technicians having the necessary training and tools to repair certain systems as mentioned such as High Voltage electric vehicles systems, however, does not see that is practical to exclude such information. For Repair Information, a vehicle’s architecture utilises various systems, sensors, etc. for an OEM to specifically exclude this information is impractical. Security Information is generally not an issue given that this information is already generally separated, as also seen in other regions.

**Example:**

To exclude any reference of a hybrid system from a wiring diagram would both be costly and potentially then useless for the user. This is also necessary information for trained mechanics to avoid safety risks when working on high voltage vehicle systems. Well trained mechanics can change brakes, which are also safety-relevant.

**Recommendation:**

*Remove safety-related systems references from @35 (2), however, require a general warning that must be shown to independent repairers concerning necessary safety measures and tools when working on such systems.*
4. Choice of Supply Period  
*Reference @45 (3)*

Bosch is concerned with the definition of the supply period, which in our view is unnecessary, unreasonable, and in many cases is unlikely to be possible to meet without significant investments by the Data Provider.

**Example:**
The present repair information available online in Australia by OEMs with supply periods of 1 day, 1 Month, 1 Year by the likes of Toyota, Ford, Kia, Hyundai, etc. are reportedly not widely used today. It is likely impracticable or commercially not viable for an IAM workshop to purchase repair, maintenance, or diagnostic information for each vehicle on a daily/monthly basis. As outlined in point 1. The IAM repairer’s choice is to have OE level diagnostics, repair, and maintenance for all brands within one tool – not purchase OEM data as needed. Additionally having to learn each OEM system adds a further level of complexity and labour cost.

The exception to the above being for software to Reprogram Electronic Control Units (ECU), Security information, and or Technical Service Bulletins (TSB) which should be available on demand.

**Recommendation:**
Bosch would propose adopting an equivalent supply period and time increments as the Data Providers apply to their Network. In this way, an Independent Repairer or RTO receives the same terms and supply period as the OEM’s network does.

The exception being for software to reprogram ECU’s, security information, and or TSB’s which should be available-on demand in the proposed periods.

5. Supply of OBD, diagnostics, repair, and maintenance information  
(Scheme Information)  
*Reference @50 (2)*

Bosch is concerned with the definition of the supply period being 2 days. Depending on what type of information that period may be too long or too short.

**Example:**
Software for an ECU re-flash/reprogramming, it would be unreasonable to have to wait for 2 days, however for an Annual Software Subscription which may also be incorporated in a physical tool which requires to be physically shipped, 2 days maybe far too short from time of ordering to delivery.
Recommendation:
Bosch would propose to adopt a supply period of the equal period a Data Provider supply to their Network today. In this way, an Independent Repairer or RTO receives the same terms and supply period as the OEM's network does.

6. Prohibited terms or conditions
Reference @55 (2)

Whilst Bosch understands the intent of not forcing the use of specific tools or services, it also must be clear that in many cases an OEM's repair solution consists of specific OEM hardware and software, of which in many cases one will not work without the other.

Example:
An OEM with a secure gateway for access to the vehicle's electronic systems for the needs of diagnosis requires the OEM software, an access algorithm, and a Vehicle Communication Interface (VCI) that can specifically authenticate and communicate with the various communication protocols of the vehicle. In most cases, it is simply not possible to use a generic tool as it will likely either not work or may not work correctly.

Recommendation:
Bosch would propose the drafted prohibition clause be amended to have an exemption where an OEM repair solution requires specific tools to function correctly.

7. Extraterritoriality
Explanatory Memorandum 1.169; 1.171

Robert Bosch GmbH (Bosch Germany) has license agreements with European OEMs whereby scheme information is made available to Bosch Germany. Currently the license is restricted to EU and scheme information is not made available to Australia. As Bosch Germany and Bosch Australia are related bodies corporate, we understand this legislation extends the licensed scheme information to Australia.

Recommendation:
Bosch seeks clarity on this position and requests this example be used in the Explanatory Memorandum to further explain the application of the scheme in such circumstances, and that the legislation is amended to address this scenario to avoid any ambiguity.
Appendix A – EU Regulations:

1) OBD information is “bumper to bumper”, not only emission-related
   - 692/2008 “Whereas” page 1 point (7); Art. 2 clause 26
   - 595/2009 Art. 3 clause 7
   - 858/2018 Art. 3 clause 49

2) “Independent operators” include tool manufacturers
   - 715/2007 Art. 3 clause 15
   - 692/2008 Art. 13 clause 8(b), Annex 1, Appendix 5 section 3
   - 595/2009 Art. 3 clause 13
   - 858/2018 Art. 3 clause 45

3) Vehicle manufacturers shall provide the relevant OBD and vehicle repair and
   maintenance information on a non-discriminatory basis to any interested
   component, diagnostic tools or test equipment manufacturer or repairer
   - 715/2007 Art.6 clause 5
   - 692/2008 Art.13; Annex XIV
   - 595/2009 Art. 6
   - 858/2018 Chapter XIV Art.61 clauses 1 and 7; Annex X clause 2.6.2; Annex X
     Appendix 2

4) Access to vehicle security shall be made available to independent operators
   - 692/2008 Annex XIV clause 2.2
   - 595/2009 Art. 6
   - 858/2018 Annex X clause 6.2

Reference Regulation Links:

Regulation (EC) No 715/2007 EURO 5 and EURO 6 (light passenger and commercial vehicles)
Regulation (EC) No 692/2008 implementing and amending 715/2007 ... on access to vehicle
repair and maintenance information
Regulation (EC) No 595/2009 EURO VI (Heavy duty vehicles)
and 595/2009