Alliance for the Freedom of CAR Repair in the EU

AFCAR

Type-approval Framework Regulation COM (2016)031

Repair and Maintenance Information (RMI)

AFCAR Position Paper
on the RMI amendments adopted in the European Parliament Plenary
on 4 April 2017

First part:

The importance of maintaining the OBD live data connector to remain open and accessible for the full RMI-related services

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1) The importance of maintaining the OBD live data connector open and accessible for the full RMI-related in-vehicle data

We refer to the European Parliament's amendments n° 248, n° 324 and n° 44

Background

For over 25 years, the physical standardised On Board Diagnostics (OBD) connector has been THE main live data port enabling communication with vehicles. This OBD connector is used with equal rights by all players in the automotive value chain, ranging from vehicle manufacturers, authorised and independent workshops, to automotive leasing and rental companies. In other words, it has been the cornerstone of independent diagnostics and independent repair methods, as well as the development of plug-in device based third party services, which have ensured innovation and consumer choice in the automotive aftermarket.

Call for regulating the current status quo

Today, the physical standardised OBD connector is legally referenced in the EU Vehicle Type-Approval legislation through a cross-referencing to the UNECE Regulations 83 (passenger cars) and 49 (heavy duty vehicles). For historic reasons, the UNECE Regulations focus primarily on emission-related data.

Vehicle manufacturers are now threatening to close the direct access via the OBD port (at least whilst the vehicle is in motion) or to restrict the scope to only vehicle-generated data relevant to emissions only (which represents just a small percentage of the vehicle repair work). Some manufacturers have also started to reduce independent accessible communication via the OBD port (both whilst in motion and stationary) and are arbitrarily proposing the unilateral issuing of proprietary digital access certificates, despite the existing Regulations still being in force. Although the introduction of a simple and commonly agreed certification scheme could help to ensure direct access to in-vehicle data is safe and secure, doing so in a unilateral basis in a costly and prohibitively complicated manner would not only fail to deliver on the prospect of enhanced security, but would also lead to consumer detriment, the stifling of new innovative mobility services in the market and reduced competition.

All this represents a very serious threat to the work of 500,000 SME companies who are active in the market of spare parts, test equipment, RMI catalogue provision, roadworthiness testing, servicing and repair. This is wholly unacceptable, and a pertinent solution has to be found.

Therefore, it is essential that the OBD connector and the associated dataflow must be maintained to be fully and directly accessible for all RMI-related data, as it is currently the case, to ensure independent diagnostic, servicing, repair, maintenance, roadworthiness testing and software updating of vehicles. Otherwise, the entire multi-brand vehicle servicing industry will be put out of business that supports innovation, independent entrepreneurship, competitive consumer choice and affordable mobility.

We call upon you to maintain the status quo and to include a clarification into the Type-Approval Regulation that the current RMI-related in-vehicle data stream shall remain fully accessible through the OBD port. This is why we call upon you to support the European Parliament's amendments n° 248, n° 324 and n° 44.

However, the Parliament's amendments could be enhanced to address all possible concerns, we therefore invite you to support the added supplementary text (underlined):

Article 65 – paragraph 3 a (new) and Annex XVIII – point 2 – point 2.8 a (new):

2.8 a. For the purpose of vehicle OBD, diagnostics, repair and maintenance, the direct vehicle data stream shall be made available through the serial port on the standardised data link connector specified in paragraph 6.5.1.4 of Appendix 1 of Annex 11 to UNECE Regulation No 83 and Section 4.7.3 of Annex 9B to UNECE Regulation No 49.

For new vehicle types, independent operators shall request certificates from an independent body that identifies the operator and electronic tools used when communicating with the vehicle for specific security functions or approved changes of the emission control systems or for read-only in-vehicle OBD, diagnostic, repair and maintenance data when the vehicle is being driven.

Additionally, vehicle manufacturers shall make available key criteria necessary for the safe communication of devices that connect through the standardised serial port (OBD) connector for when the vehicle is being driven.

Detailed explanations on the suggestions for the improvements of the OBD port:

- **Scope of data to be maintained**

The data which shall continue to remain accessible via the OBD port shall be all diagnostics and RMI-related in-vehicle generated data. This is made clear in the EP amendment n° 324 which states: *"For the purpose of vehicle OBD, diagnostics, repair and maintenance…"*

- **When shall this comprehensive data be made available?**

a) When the vehicle is stationary (vehicle speed = 0km/h) with the engine either on or off, the OBD port shall be accessible without any safety restrictions that are related to remote data access. Only security measures within the scope of the SERMI scheme shall be active.

b) When the vehicle is on the road (in motion), but for **read-only data**. This access to data when the vehicle is being driven is needed for two reasons (both elements are essential):
   - to conduct the evaluation and verification of dynamic vehicle generated data – e.g. when road testing a vehicle to either diagnose a problem, or ensure that a repair has been completed correctly;
   - to allow plug-in devices that are compatible with the OBD port to be installed for remote services (e.g. diagnostics, prognostics or predictive maintenance services). This is absolutely essential, because independent operators do not currently have any other possibility to offer remote services. So, it is necessary to continue to allow plug-in devices to be installed for remote services that in the future will also be fulfilled by an in-vehicle standardised, interoperable, secure and open-access platform that has been regulated to ensure equal rights for both vehicle manufacturers and multi-brand operators.

c) No writing of data to the vehicle's control units is required when the vehicle is in motion. Remote actuation/re-coding would only be done when the vehicle is stationary.

- **Safe and secure use of the OBD connector**

To address potential safety and security issues when using the OBD connector, independent operators could accept for new types of vehicle, a company accreditation and certification scheme for the safe and secure use of the OBD connector. This would have two elements:

a) A company identification certificate for the independent operator

To access in-vehicle data, the independent operator communicating via a (connected) diagnostic tool with the OBD connector for specific functions (e.g. anti-theft related data or manipulation of emission control systems) should be identifiable. This could be done by using the existing SERMI[1] scheme for an 'identity certificate' of the independent operator and for the (connected) diagnostic tool which will communicate with the OBD connector. As such, both the independent operator and the manufacturer of the OBD tool can be identified if necessary.
The functions described above shall be possible using both independent diagnostic tools and applications and vehicle manufacturers' diagnostic tools and applications/'pass-through' processes.

b) Electronic communication certificates for connected devices

Furthermore, and linked to the company identification certificate, for read-out functions when the vehicle is in motion, **electronic communication certificates** should be used. As such, the communication between the vehicle and the (connected) diagnostic tool shall be authorised by an electronic certificate in accordance with technical standard ISO 20828.

This process will apply when the (connected) diagnostic tool is initially connected.
This will allow an electronic communication certificate to be obtained via the independent body and subsequently be jointly associated with the vehicle and the plug-in device when the plug-in device is initially connected to the OBD connector.

For the instances where independent operators have to 'write' data into the vehicle (e.g. when re-setting an error code, when re-coding a replacement part into the vehicle system or when performing an actuator test), then this is only done when the vehicle is stationary.

The above should apply in the same way to both authorised and independent operators to ensure non-discrimination.

Why certificates from an independent body?

Vehicle manufacturers are proposing to use electronic communication certificates. However, without any rules/communalities, this would be done in a totally proprietary manner with non-harmonised access criteria and conditions for each vehicle manufacturer leading to a proliferation of proprietary solutions. The management of all the different certificates would be so burdensome for independent operators it would become impossible at a practical. This is why we suggest **using the existing SERMI certification scheme** for access to security-related RMI to act as an independent certification body.

[1] The **SERMI scheme** for the accreditation, approval and authorisation to provide access to Security-related Repair and Maintenance Information.

The advantages are:

- The existing SERMI scheme is designed to conduct accreditation schemes for the company identification. The scope of the SERMI scheme would be expanded to accommodate granting of standardised, electronic communication certificates for (connected) diagnostic tools.
- Authorised or independent market operators need to contact **only one single independent body** for the certificate and not all vehicle manufacturers; arbitrary decisions with resulting adverse effects on independent service providers by the vehicle manufacturers could thus be prevented.
- The overall product approval and certification process is defined and agreed by all stakeholders, including the vehicle manufacturers and independent operators, as SERMI is composed of a 50:50 representation.
- The independent body itself is controlled by a national authority for accreditation.

With these two methods of certification, a controlled access to the OBD connector dataflow is achieved.

- **"Developer Guidelines"**

Many of the usages of the OBD connector concern only read-out functions. These will not interfere with the safe and secure functionality of the vehicle systems when the vehicle is stationary. However, to avoid potential problems during the reading out of data (e.g. preventing on-board data communication BUS overload by multiple requests from a plug-in device) when the vehicle is in motion, we ask that vehicle manufacturers provide a set of key parameters (such as e.g. data request criteria, Busload parameters), which must be respected by developers of plug-in devices. This follows the principles used by the vehicle manufacturers themselves who increasingly install retrofit plug-in devices as part of their own service offer. As these vehicle manufacturers' plug-in devices function safely and to ensure a level playing field with the manufacturer in his role as service provider, independent operators must be given the same opportunity to design their own plug-in devices according to the same key requirements.

This mechanism is already enshrined in Regulation 692/2008, Annex I, Appendix 5, points 1-2 where vehicle manufacturers have to provide key parameters to independent parts producers to ensure the compatibility of independent replacement parts with the OBD system.

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ADPA – the European Independent Data Publishers Association aims to ensure fair access to automotive data and information and to provide competitive framework conditions for independent data publishers. This will allow the publishers to be able to design and provide competitive, innovative and multibrand products and services to operators of the automotive aftermarket.

CECRA- the European Council for Motor Trades and Repairs- is the European Federation representing the interests of the motor trade and repair businesses and European Dealer Councils on behalf of vehicle dealers for specific makes. Its main aim is to maintain a favourable European regulatory framework for the enterprises of motor trade and repair businesses it represents.

EGEA- the European Garage and test Equipment Association represents both manufacturers and importers of tools and equipment for the repair, servicing and technical inspection of vehicles, as an integral part of supporting the automotive industrial value chain. Its role is to provide a healthier environment for the garage and test equipment industry throughout Europe and a stronger support to ensure competitive consumer choices for affordable mobility against the background of the increasing vehicle technology and complexity.

The Fédération Internationale de l'Automobile (**FIA**) Region I is a consumer body representing European Mobility Clubs and their 37 million members. The FIA represents the interests of these members as motorists, riders, pedestrians and passengers. FIA Region I is working to ensure safe, affordable, clean and efficient mobility for all.

FIGIEFA is the international federation of independent automotive aftermarket distributors. Its members represent retailers and wholesalers of automotive replacement parts and components and their associated repair chains. FIGIEFA's aim is to maintain free and effective competition in the market for vehicle replacement parts, servicing and repair.

Leaseurope - the European Federation of Leasing Company Associations- represents both the leasing and automotive rental industries in Europe. The scope of products covered by Leaseurope members' ranges from hire purchase and finance leases to operating leases of all asset categories (automotive, equipment and real estate). It also includes the short term rental of cars, vans and trucks.

UEIL (the Union of the European Lubricants Industry) represents the interests of the lubricants industry in Europe, with a special focus on SMEs and independent companies that produce lubricants and metal processing fluids essential for the automotive and industrial sectors.

AFCAR - Alliance for the Freedom of Car Repair in the EU. Created in 1997, AFCAR is an alliance of the independent European associations with the aim is to promote fair competition in the market for vehicle servicing and repair. Members of AFCAR are: ADPA (European Independent Data Publishers Association), AIRC (Association International Réparateurs en Carrosserie), CECRA (European Council for Motor Trades and Repair), EGEA (European Garage Equipment Association), FIA (Fédération Internationale de l'Automobile), FIGIEFA (International Federation of Automotive Aftermarket Distributors), Leaseurope (European Rental and Leasing Industry) and UEIL (the Union of the European Lubricants Industry).